

1. Planning Board Regular Zoom Meeting Agenda - Amended

Documents:

[20200924 NCPB AGENDA AMENDED1 .PDF](#)

2. Planning Board Staff Reports And Plans

Documents:

[20200924 452 AMHERST STREET CUP STAFF REPORT.PDF](#)
[20200924 452 AMHERST STREET CUP PLAN.PDF](#)
[20200924 117 WEST GLENWOOD STREET LOT LINE RELOCATION STAFF REPORT.PDF](#)
[20200924 117 WEST GLENWOOD STREET LOT LINE RELOCATION PLAN.PDF](#)
[20200910 1 MORNINGSIDE DRIVE SUBDIVISION STAFF REPORT.PDF](#)
[20200924 1 MORNINGSIDE DRIVE SUBDIVISION PLAN.PDF](#)
[20200924 32 GROTON ROAD SUBDIVISION STAFF REPORT.PDF](#)
[20200924 32 GROTON ROAD SUBDIVISION PLAN.PDF](#)
[20200924 452 AMHERST STREET SITE PLAN STAFF REPORT.PDF](#)
[20200924 452 AMHERST STREET SITE PLAN.PDF](#)
[20200924 117 WEST HOBART STREET SITE PLAN STAFF REPORT.PDF](#)
[20200924 117 WEST HOBART STREET SITE PLAN.PDF](#)
[20200924 190 BROAD STREET SITE PLAN.PDF](#)
[20200924 190 BROAD STREET SITE PLAN STAFF REPORT.PDF](#)
[20200924 133 AMHERST STREET SITE PLAN STAFF REPORT.PDF](#)
[20200924 133 AMHERST STREET SITE PLAN.PDF](#)
[20200924 25 INGALLS STREET SITE PLAN STAFF REPORT.PDF](#)
[20200924 25 INGALLS STREET SITE PLAN.PDF](#)



City of Nashua
Planning Department
229 Main Street
Nashua, New Hampshire 03061-2019

Planning & Zoning 589-3090
Fax 589-3119
WEB www.nashuanh.gov

September 22, 2020

AMENDED AGENDA

To: NCPB Members

From: Planning Staff

Re: Regular Meeting and Public Hearing, September 24, 2020

Notice is hereby given that a Public hearing of the City of Nashua Planning Board will meet on Thursday, September 24, 2020 at 7:00 PM via a Zoom Meeting. Real-time public comment can be addressed to the Board utilizing Zoom virtual meeting software for remote access. This application will allow users to view the meeting and ask questions to the Board via the chat function. The public is also encouraged to submit their comments via email planningdepartment@nashuanh.gov to the Department email or by mail (please make sure to include your name/address and comments) by 5pm on September 24, 2020 and read into the record at the appropriate time. Letters should be addressed to City of Nashua, Planning Department, P.O. Box 2019, Nashua, NH 03061. Plans can be viewed online starting September 18, 2020 at www.nashuanh.gov in the Calendar or Agendas and Minutes.

To access Zoom: <https://us02web.zoom.us/j/87504885237?pwd=WSt1ZmhEOURjck8wb2pUdEJ2UytpQT09>

Meeting number/access code: **875 0488 5237** – Password: **047158**

To join by phone: **1 (929) 436-2866** - Meeting number/access code: **875 0488 5237**

If for some reason you can't connect to Zoom, please contact us at **(603) 589-3115**.

- A. Call to Order
- B. Roll Call
- C. Approval of Minutes – September 10, 2020
- D. Communications
- E. Report of Chairman, Committee, & Liaison
- F. Executive Session

OLD BUSINESS – CONDITIONAL / SPECIAL USE PERMITS

None

OLD BUSINESS - SUBDIVISION PLANS

None

OLD BUSINESS – SITE PLANS

None

NEW BUSINESS – CONDITIONAL / SPECIAL USE PERMITS

1. Alla Maak Properties, LLC (Owner) - TMC of New England, LLC (Applicant) - Application and acceptance of proposed Conditional Use Permit to construct a convenience store with gas station. Property is located at 452 Amherst Street. Sheet H - Lot 143. Zoned "PI/MU" Park Industrial Mixed Use. Ward 2.

NEW BUSINESS – SUBDIVISION PLANS

2. Roscommon Investments, LLC and MAG RE Holdings-Nashua, LLC (Owners). - Application and acceptance of proposed lot line adjustment. Property is located at 117 West Glenwood Street and "L" West Hobart Street. Sheet 132 - Lots 84 & 31. Zoned "RA" Urban Residence. Ward 7. **(Postponed from the September 10, 2020 meeting)**
3. MG Holdings (Owner) - Proposed three lot subdivision. Application and acceptance of property is located at 1 Morningside Drive. Sheet 118 - Lot 129. Zoned "RA" Urban Residence. Ward 7. **(Postponed from the September 10, 2020 meeting)**
4. The Terrell-Holt Family Revocable Trust-2005 (Owner) B&A Construction, LLC (Applicant) - Application and acceptance of proposed 10 lot conservation subdivision with associated site improvements. Property is located at 32 Groton Road. Sheet D - Lot 265. Zoned "R-40" Rural Residence. Ward 5.

NEW BUSINESS – SITE PLANS

5. Alla Maak Properties, LLC (Owner) TMC of New England, LLC (Applicant) - Application and acceptance of proposed amendment to NR0946 to demolish the existing building and construct a convenience store with gas station and associated site improvements. Property is located at 452 Amherst Street. Sheet H - Lot 143. Zoned "PI/MU" Park Industrial Mixed Use. Ward 2.
6. Roscommon Investments, LLC (Owner) - Application and acceptance of proposed site plan to construct a new 22,560 sf auto body shop with parking, vehicle storage, and associated site improvements. Property is located at 117 West Hobart Street, "L" Glenwood Street, and "L" West Hobart Street. Sheet 132, Lots 84 & 38. Sheet 128, Lots 31, 32, & 84. Zoned "HB" Highway Business and "RA" Urban Residence. Ward 7. **(Postponed from the September 10, 2020 meeting)**
7. Granite State Credit Union (Owner) - Application and acceptance of proposed amendment to NR2186 to show a proposed 2-story, 10,000 sf credit union with drive-through facilities and associated site improvements. Property is located at 190 Broad Street. Sheet E - Lot 744. Zoned "GB" General Business. Ward 1.
8. Colinbrooke Homes, LLC (Owner) - Application and acceptance of proposed site plan to develop property into a detached condominium development. Property is located at 133 Amherst Street. Sheet 65 - Lot 60. Zoned "RA" Urban Residence. Ward 2.
9. Tumpney, Hurd, Clegg (Owners) - Application and acceptance of proposed site plan to develop property into two duplexes for a total of four residential units. Property is located at 25 Ingalls Street. Sheet 6 - Lot 6. Zoned "RC" Urban Residence. Ward 7.
10. Liberty Utilities (Owner) - Application and acceptance of proposed amendment to install an impermeable cap over former Gas Holders #1 & #2 to meet requirements of the NH Department of Environmental Services, regrade, repave and expand the site's existing parking lot and improve the stormwater management system. Property is located at 25 Van Buren & 38 Bridge Streets. Sheets 4 & 39 - Lots 11 & 26. Zoned "TOD" Transit Oriented Development and GI-General Industrial. Ward 7. **(Postponed until October 22, 2020 meeting)**

OTHER BUSINESS

1. Review of tentative agenda to determine proposals of regional impact.
2. Adoption of the "2021" Meeting and Deadlines Dates" for the Nashua City Planning Board.

DISCUSSION ITEM

None

NONPUBLIC SESSION

The Planning Board will need to make a motion to enter into a Nonpublic Session under RSA 91-A:3, II (e) for consideration or negotiation of pending claims or litigation which has been threatened in writing or filed against the public body.

NEXT MEETING

October 8, 2020

ADJOURN

WORKSHOP

ACCOMMODATIONS FOR THE SENSORY IMPAIRED

**"SUITABLE ACCOMMODATIONS FOR THE SENSORY IMPAIRED
WILL BE PROVIDED UPON ADEQUATE ADVANCE NOTICE."**

CONDUCT AT PLANNING BOARD MEETING

When the meeting is called to order, the only talking allowed in the Auditorium will be remarks addressed to the Chairman. Except for the original presentation of the subject or application, each person speaking for or against shall be limited to five (5) minutes until all have been given an opportunity to be heard, at which time each person may be allowed additional time if deemed necessary by the Board or the Chairman. When you are recognized by the Chairman, proceed to the podium, using the microphone, state your name and address and then make your comments. Courtesy is shown when you reserve your comments for the proper time.

PLEASE BE COURTEOUS

By Order of the Chair

NASHUA CITY PLANNING BOARD
STAFF REPORT

TO: Nashua City Planning Board
FROM: Linda McGhee, Deputy Planning Manager
FOR: September 24, 2020
RE: **New Business #1 - Conditional Use Permit**

Owner: Alla Maak Properties, LLC
Applicant: TMC CF of New England, LLC
Proposal: Conditional Use Permit to construct a convenience store with a gas station
Location: 452 Amherst Street
Total Site Area: 1.156 acres (50,345 sf)
Existing Zoning: PI-Park Industrial/MU-Mixed Use
Surrounding Uses: Commercial

II. Background Information:

The building at 452 Amherst Street, known as the Country Tavern, has stood on its site for over two hundred years; recently they announced its permanent closure. Once part of a small farm with 40+ acres, it was renovated for use as a restaurant in the early 1980s. The Zoning Board of Adjustment granted a Use Variance in 1981 to convert the existing house and barn to a restaurant use with a Special Exception to increase parking. In 1982, an easement was placed on the property to preserve the appearance of the façade as it then existed in perpetuity.

On September 12, 2019 the applicant received a favorable recommendation from this board to release the façade easement and on October 8, 2019 the Board of Alderman approved the release of the façade easement.

In 2018 the Board of Alderman rezoned a portion of Amherst Street from Airport Industrial to Park Industrial/Mixed Use to allow for greater flexibility and reflect what is going on these lots.

On June 9, 2020 the ZBA approved a Use Variance to allow a convenience store/gas station where 75% of the building gross floor area is otherwise required to be reserved for used in the “industrial and manufacturing” category to allow this project to move forward.

III. Project Description:

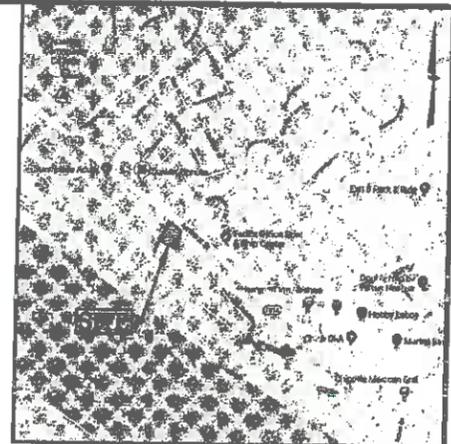
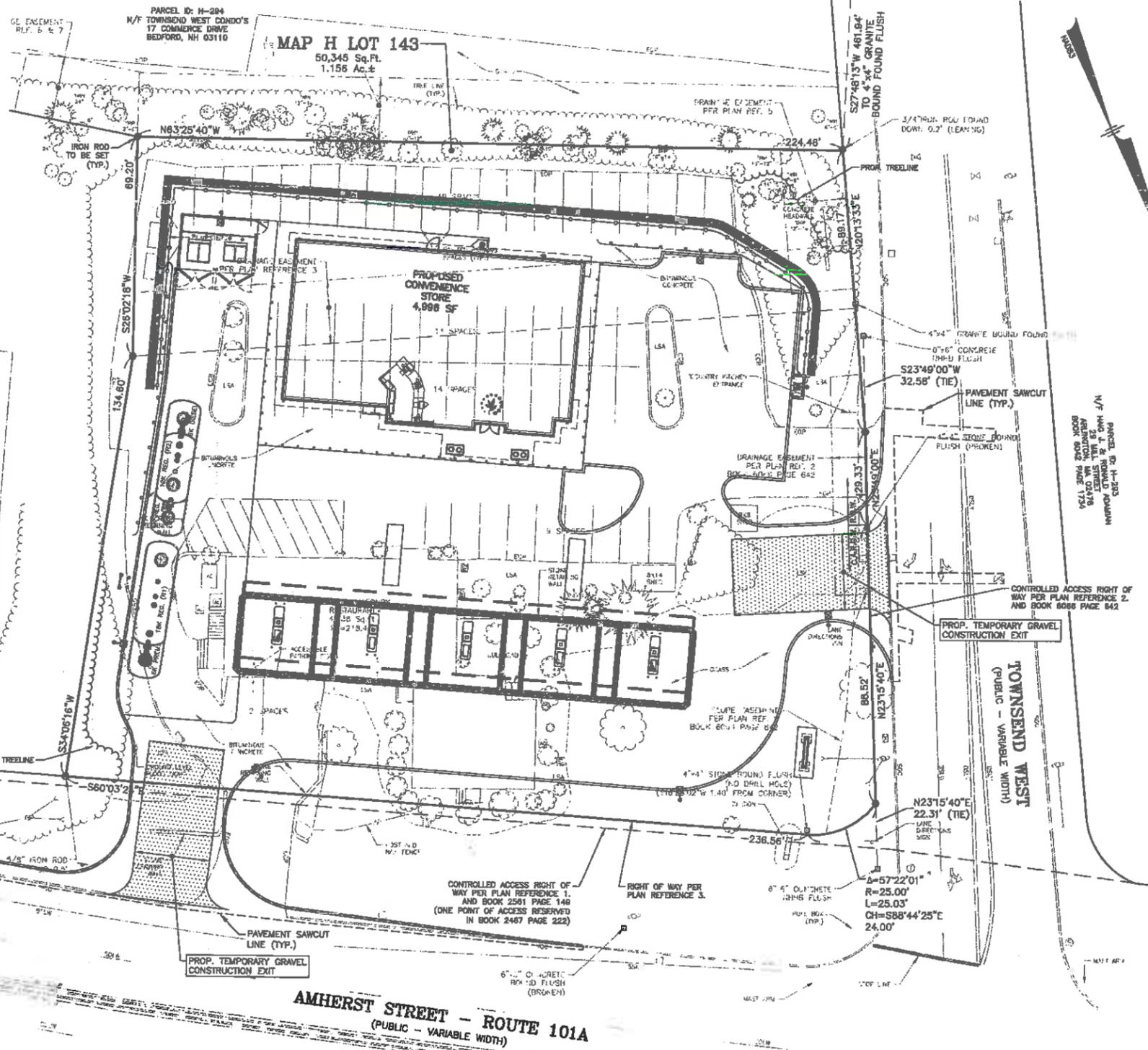
The proposal is for a conditional use permit to construct a convenience store with a gas station (see staff report for corresponding site plan). The change is only permitted conditionally. There are nine approval criteria for a conditional use permit found in NRO § 190-133(F). The applicant addresses the criteria in the attached letter.

City Staff reviewed the plans; there are no outstanding issues.

IV. Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet, the requirements outlined in the Site Plan NRO Section 190-133(F). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, they should state specific reasons. If the Planning Board chooses to approve this plan, the staff recommends the following stipulation be made part of that approval:

None



LOCATION MAP
(NOT TO SCALE)

- NOTES:**
- 1) THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED LIMITS OF SITE IMPROVEMENTS AND DEMOLITION ACTIVITIES OVERLAYED ON THE EXISTING CONDITIONS.
 - 2) REFER TO SHEETS 5-9 OF 13 FOR ADDITIONAL LAYOUT AND DETAILED INFORMATION.

LEGEND

| | | | |
|--|--------------------------|--|-------------------|
| | VERTICAL GRANITE CURB | | SIGN |
| | CAPE COD BERM | | SPOT ELEVATION |
| | DOUBLE SOLID LINE YELLOW | | DRAIN MANHOLE |
| | SINGLE SOLID LINE WHITE | | CATCH BASIN |
| | GAS LINE | | VENT |
| | UNDERGROUND TELEPHONE | | SEWER MANHOLE |
| | WATER LINE | | TELEPHONE MANHOLE |
| | UNDERGROUND ELECTRIC | | MANHOLE |
| | POST & RAIL FENCE | | GAS VALVE |
| | GUARDRAIL | | GAS SHUT OFF |
| | CONTOUR ELEVATION | | WATER VALVE |
| | TREE | | WATER SHUT OFF |
| | UTILITY POLE | | FIRE HYDRANT |
| | GUY WIRE | | BOLLARD |
| | OVERHEAD WIRE | | GAS METER |
| | TREELINE | | ELECTRIC METER |
| | PULL BOX | | LIGHT POLE |
| | NUMBER OF PARKING SPACES | | |



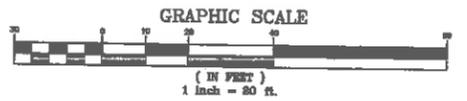
AMHERST STREET - ROUTE 101A
(PUBLIC - VARIABLE WIDTH)

OWNER OF RECORD:
PARCEL ID: H-143
ALLA MAAK PROPERTIES, LLC
452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064-1228
BOOK 6871 PAGE 852



| REVISIONS | | | |
|-----------|---------|---------|-----------------|
| NO. | DATE | REV. BY | DESCRIPTION |
| 1 | 7/27/20 | CMT | MISC. REVISIONS |

50,345 SQUARE FEET
1.156 ACRES
V#
Store#
Gas Station#



GPI Engineering Design Planning Construction Management
Greenman-Pedersen, Inc.
44 Siles Road
Suite One
Salem, NH 03079

452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064
CUMBERLAND FARMS INC.
165 FLANDERS ROAD
WESTBOROUGH, MA 01581

SITE PLAN OVERLAY
CFG04.1

NASHUA CITY PLANNING BOARD
STAFF REPORT

TO: Nashua City Planning Board
FROM: Linda McGhee, Deputy Planning Manager
FOR: September 10, 2020
RE: **New Business #3 - Subdivision**

I. Project Statistics:

Owner : Roscommon Investments, LLC and MAG RE Holdings-Nashua, LLC
Proposal: Lot line relocation plan and consolidation
Location: 117 West Glenwood Street and “L” West Hobart Street
Total Site Area: 3.761 acres (163,828 sf)
Existing Zoning: RA-Urban Residence
Surrounding Uses: Residential and commercial

II. Background Information:

Lot 84 (“L” West Hobart Street) is a vacant lot that is mostly wooded. On August 4, 2016 the planning board approved a site plan for a 163 space parking lot on Lot 31 (117 West Glenwood Street); the approval letter and staff report are attached.

III. Project Description:

The purpose of this plan is to show a proposed lot line adjustment and consolidation for Sheet 132, Lot 84 and Sheet 132 Lot 31. A proposed access easement will be created to benefit Roscommon Investments, LLC. Parcel “A” as shown on the plan will be consolidated with Sheet 132, Lot 84. Parcels “B” & “C” as shown on the plan will be consolidated with Sheet 132, Lot 31. A site plan has also been submitted as part of the project.

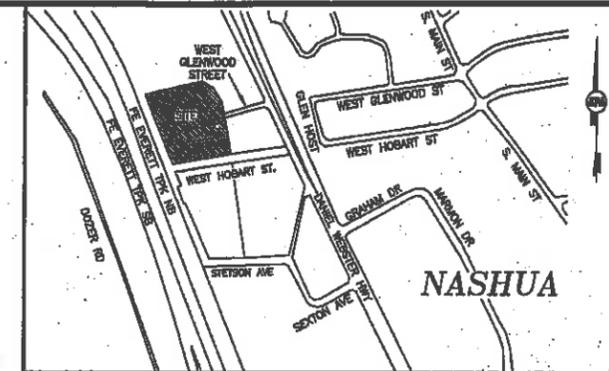
The applicant has requested a waiver from the requirement to show physical features on site and within 1,000 feet.

The plan was reviewed by City staff; comments are attached.

Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet the requirements outlined in the Subdivision NRO § 190-138(G). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, specific reasons should be given. If the Planning Board chooses to approve this plan, staff recommends the following stipulation be made part of that approval:

1. The request for a waiver of § 190-282(B)(9), which requires an existing conditions plan, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
2. Prior to the Chair signing the plan, all minor drafting corrections will be made.
3. Prior to the Chair signing the plan, all comments in an e-mail from Joe Mendola, Street Construction Engineer dated _____ shall be addressed to the satisfaction of the Engineering Department.
4. Prior to recording of the plan, all conditions from the Planning Board approval letter will be added to the final mylar and paper copies submitted to the City.
5. Prior to recording the plan, the electronic file of the plan shall be submitted to the City of Nashua.
6. Any easements will be submitted to Planning staff for review and recorded with the plan at the applicant's expense.
7. The site plan for 117 West Glenwood Street will need to be amended to show the change in lot size.



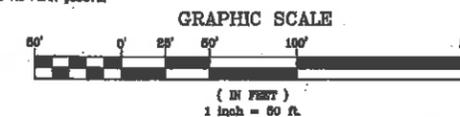
VICINITY PLAN
SCALE: 1" = 500' +/-

NOTES:

- THE PURPOSE OF THIS PLAN IS TO DEPICT PROPOSED LOT LINE ADJUSTMENTS AND CONSOLIDATIONS ON ASSESSOR'S MAP 128 LOT 84 AND MAP 132 LOT 31 SITUATED ON THE WESTERLY END OF WEST GLENWOOD STREET IN NASHUA, NEW HAMPSHIRE. FURTHER TO SHOW INFORMATION FOR A PROPOSED ACCESS EASEMENT FOR THE BENEFIT OF ROSCOMMON INVESTMENTS, LLC AND NO OTHER PURPOSE. LOT AREAS PRIOR TO ADJUSTMENTS: MAP 132 LOT 31: 112,108 S.F. OR 2.573 ACRES. MAP 128 LOT 84: 35,385 S.F. OR 0.812 ACRES.
- PARCEL "A" IS TO BE CONSOLIDATED WITH MAP 132 LOT 84.
- PARCELS "B" & "C" TO BE CONSOLIDATED WITH MAP 132 LOT 31.
- ZONING: URBAN RESIDENCE DISTRICT (R-A)
MINIMUM BUILDING SETBACKS:
- FRONT: 25 FT
- SIDE: 10 FT
- REAR: 25 FT
HIGHWAY BUSINESS DISTRICT (HB)
- FRONT: 20 FT
- SIDE: 10 FT
- REAR: 20 FT
- BOUNDARY AND TOPOGRAPHIC INFORMATION IS BASED ON A FIELD SURVEY PERFORMED BY THIS OFFICE IN DECEMBER OF 2017 AND JANUARY OF 2018 HAVING A MINIMUM ERROR OF CLOSURE OF NOT LESS THAN ONE PART IN TEN THOUSAND (1/10,000).
- HORIZONTAL DATUM IS NAD 83. NORTH ORIENTATION IS NAD 83. VERTICAL DATUM IS NAVD83.
- EXAMINATION OF THE FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOOD INSURANCE RATE MAPS (FIRM) FOR THE CITY OF NASHUA NEW HAMPSHIRE, HILLSBOROUGH COUNTY, COMMUNITY PANEL NUMBER 330087 082E PANEL NUMBER 852 OF 701, EFFECTIVE DATE: APRIL 16, 2011 INDICATES THAT NO PORTION OF THE SUBJECT PREMISES IS LOCATED WITHIN A DESIGNATED FLOOD HAZARD AREA.
- THE LOCATION OF ANY UNDERGROUND UTILITY INFORMATION SHOWN ON THIS PLAN IS APPROXIMATE. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO CLAIM TO THE ACCURACY OR COMPLETENESS OF UTILITIES SHOWN. PRIOR TO ANY EXCAVATION ON SITE THE CONTRACTOR SHALL CONTACT DIG SAFE AT 811.
- EASEMENTS, RIGHTS AND RESTRICTIONS SHOWN OR IDENTIFIED HEREON ARE THOSE FOUND DURING RESEARCH AT THE ROCKINGHAM COUNTY REGISTRY OF DEEDS. OTHER EASEMENTS, RIGHTS AND RESTRICTIONS MAY EXIST WHICH A TITLE EXAMINATION OF THE SUBJECT PREMISES MAY DETERMINE.
- BOUNDARY INFORMATION FOR MAP 132 LOT 31 IS BASED ON REFERENCE PLAN 1. THE BEARINGS SHOWN ON REFERENCE PLAN 4 HAVE BEEN TRANSLATED TO MATCH THE BEARING SYSTEM OF THE SURVEY WORK BY THIS OFFICE.
- SUBJECT TRACTS HAVE AVAILABLE MUNICIPAL SEWER SERVICE AND PENNACLUK WATER WORKS WATER SERVICE.
- ANY FUTURE BUILDING CONSTRUCTION SHALL INCORPORATE FOUNDATION DRAINAGE SYSTEMS, EXCEPT WHERE AN INVESTIGATION ESTABLISHES THAT SPECIFIC BUILDING SITES ARE LOCATED WITHIN WELL DRAINED SOILS AND THAT SUCH SYSTEMS ARE NOT REQUIRED.

REFERENCE PLANS:

- EASEMENT PLAN, MAP 132 LOT 31, 117 WEST GLENWOOD STREET, NASHUA, NEW HAMPSHIRE. DATED: 30 SEPTEMBER 2016. SCALE: 1"=30'. PREPARED BY HATNER/SWANSON INC. HORD PLAN #39110.
- BOUNDARY PLAN - SIKENIEWCZ PROPERTY, WEST GLENWOOD STREET, NASHUA, NEW HAMPSHIRE. SCALE: 1"=50'. DATED: JANUARY 22, 2018. PREPARED BY THIS OFFICE. RECORDED AT THE HORD AS PLAN #39572.



Lot Line Adjustment & Consolidation Plan

between the lands of
ROSCOMMON INVESTMENTS, LLC & MAG RE HOLDINGS-NASHUA, LLC
MAP 132 LOTS 31 & 84 and MAP 128 LOTS 31, 32 & 84
117 WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNERS OF RECORD:

ROSCOMMON INVESTMENTS, LLC MAG RE HOLDINGS-NASHUA, LLC
147 D.W. HIGHWAY 777 WASHINGTON STREET
NASHUA, NH 03080 NEWTON, MA 02460
H.C.R.D. BK. 9045 PG. 874 H.C.R.D. BK. 8926 PG. 2664



Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 35, Bedford, NH 03110 Phone (603) 687-8881

REVISIONS

| No. | DATE | DESCRIPTION | BY |
|-----|------|-------------|----|
| | | | |
| | | | |
| | | | |
| | | | |



SURVEYOR'S CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION. FURTHER, THAT THIS PLAN IS BASED ON AN ACTUAL FIELD SURVEY MADE ON THE GROUND BY THIS OFFICE DURING DECEMBER OF 2017 AND JANUARY OF 2018. SAID SURVEY HAS AN ERROR OF CLOSURE BETTER THAN ONE PART IN TEN THOUSAND (1/10,000).

Michael J. Keach 6-16-2020
LICENSED LAND SURVEYOR DATE

OWNER'S SIGNATURE BLOCK

[Signature] 6/18/2020
ROSCOMMON INVESTMENTS, LLC DATE

[Signature] 6/22/20
MAG RE HOLDINGS-NASHUA, LLC DATE

APPROVED - NASHUA CITY PLANNING BOARD

CHAIRMAN DATE

SECRETARY DATE

LINE TABLE

| LINE | LENGTH | BEARING | LINE | LENGTH | BEARING |
|------|--------|-------------|------|--------|-------------|
| L1 | 16.19 | N00°26'13"E | L12 | 19.78 | S78°16'50"W |
| L2 | 20.41 | N03°04'07"E | L13 | 22.00 | S70°27'06"W |
| L3 | 12.78 | N08°37'05"E | L14 | 18.03 | S69°32'30"W |
| L4 | 17.21 | N16°43'40"E | L15 | 22.84 | S46°10'07"W |
| L5 | 18.61 | N53°36'37"E | L16 | 22.29 | S33°36'37"W |
| L6 | 18.42 | N45°10'07"E | L17 | 20.49 | S18°43'40"W |
| L7 | 12.70 | N59°32'30"E | L18 | 14.64 | S08°37'05"W |
| L8 | 19.81 | N70°27'58"E | L19 | 21.49 | S03°04'07"W |
| L9 | 20.84 | N78°12'28"E | L20 | 16.54 | S00°28'13"W |
| L10 | 1.43 | N81°36'00"E | L21 | 2.28 | S03°29'30"E |
| L11 | 15.48 | N28°18'28"W | L22 | 15.00 | N81°40'47"E |
| | | | L23 | 22.44 | S03°11'03"E |
| | | | L24 | 19.04 | N76°18'50"E |
| | | | L25 | 24.58 | N70°27'58"E |
| | | | L26 | 10.67 | S59°32'30"W |
| | | | L27 | 69.83 | N05°12'25"W |

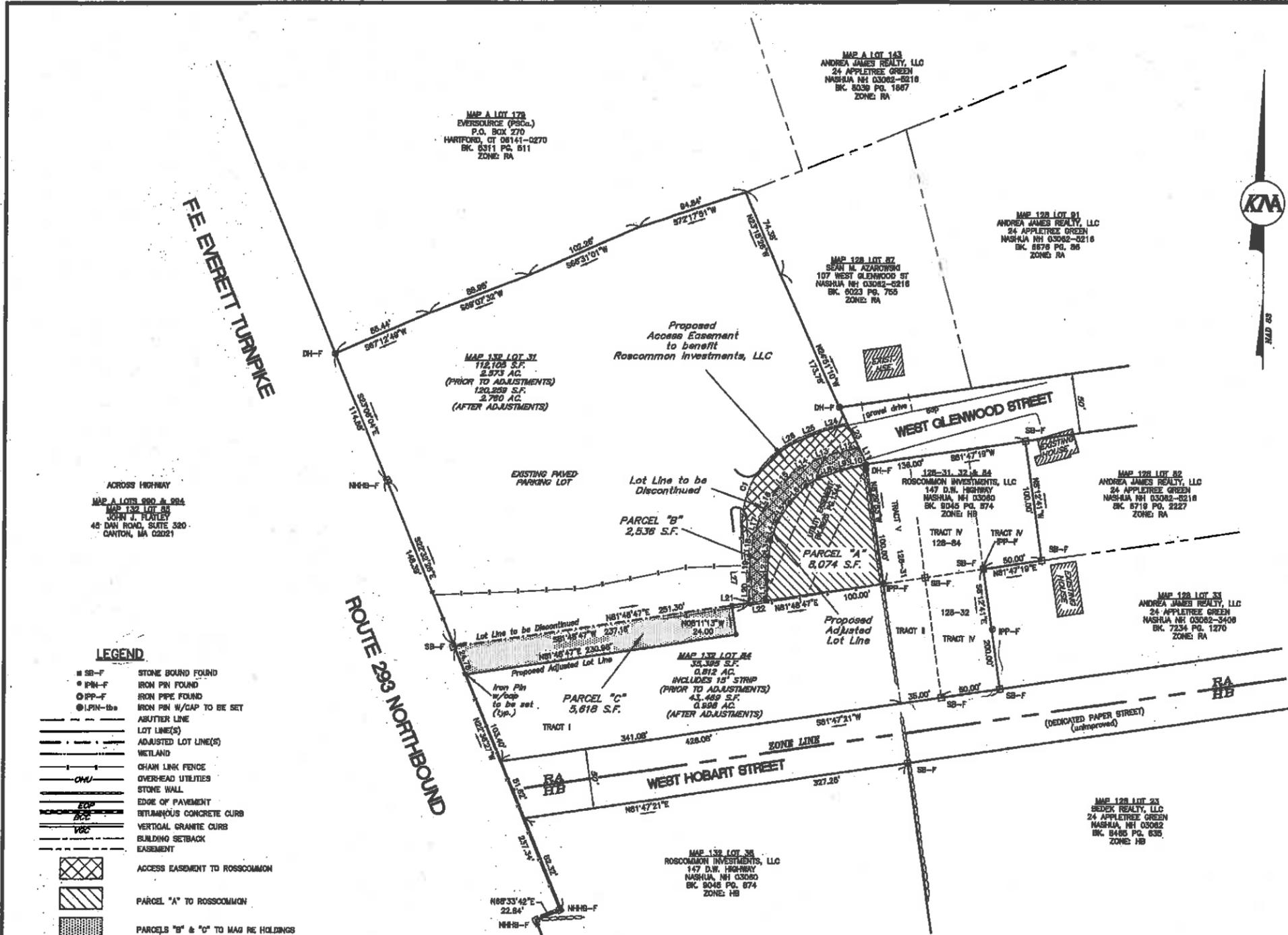
CURVE RADII/ARC LENGTH/CHORD LENGTH/CHORD BEARING/DELTA ANGLE

| | | | | | |
|----|--------|--------|--------|--------------|------------|
| C1 | 175.00 | 184.76 | 180.32 | 1S27°10'02"W | 164°44'55" |
|----|--------|--------|--------|--------------|------------|



UTILITY NOTE

THE UNDERGROUND UTILITIES DEPICTED HEREON HAVE BEEN DRAWN FROM FIELD SURVEY INFORMATION AND OR PLOTTED FROM EXISTING DRAWINGS. KEACH-NORDSTROM ASSOCIATES, INC. MAKES NO GUARANTEES THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. FURTHER, KEACH-NORDSTROM ASSOCIATES, INC. DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. KEACH-NORDSTROM ASSOCIATES, INC. HAS NOT PHYSICALLY LOCATED THE UNDERGROUND PORTIONS OF THE UTILITIES.



LEGEND

- SB-F STONE BOUND FOUND
- IPN-F IRON PIN FOUND
- IPP-F IRON PIPE FOUND
- IPIN-1/2" IRON PIN W/CAP TO BE SET
- ASUTTER LINE
- LOT LINE(S)
- ADJUSTED LOT LINE(S)
- WETLAND
- CHAIN LINK FENCE
- OVERHEAD UTILITIES
- STONE WALL
- EDGE OF PAVEMENT
- BITUMINOUS CONCRETE CURB
- VERTICAL GRANITE CURB
- BUILDING SETBACK EASEMENT
- ACCESS EASEMENT TO ROSCOMMON
- PARCEL "A" TO ROSCOMMON
- PARCELS "B" & "C" TO MAG RE HOLDINGS

FE. EVERETT TURNER



MAP 88

ACROSS HIGHWAY
MAP A LOTS 880 & 884
MAP 132 LOT 88
JOHN J. FAYES
45 DAN ROAD, SUITE 320
CANTON, MA 02021

MAP A LOT 178
EVENSOURCE (PSCo.)
P.O. BOX 270
HARRIFORD, CT 06111-0270
BK. 6311 PG. 611
ZONE: RA

MAP A LOT 143
ANDREA JAMES REALTY, LLC
24 APPLE TREE GREEN
NASHUA, NH 03082-0218
BK. 8039 PG. 1867
ZONE: RA

MAP 128 LOT 81
ANDREA JAMES REALTY, LLC
24 APPLE TREE GREEN
NASHUA, NH 03082-0218
BK. 8676 PG. 26
ZONE: RA

MAP 128 LOT 87
SEAN H. AZAROVICH
107 WEST GLENWOOD ST
NASHUA, NH 03082-0218
BK. 8023 PG. 768
ZONE: RA

MAP 132 LOT 31
112,108 S.F.
2.573 AC.
(PRIOR TO ADJUSTMENTS)
120,329 S.F.
2.780 AC.
(AFTER ADJUSTMENTS)

Lot Line to be Discontinued
PARCEL "B"
2,538 S.F.

Lot Line to be Discontinued
PARCEL "C"
5,618 S.F.

MAP 132 LOT 84
35,385 S.F.
0.812 AC.
INCLUDES 18' STRIP
(PRIOR TO ADJUSTMENTS)
43,489 S.F.
0.998 AC.
(AFTER ADJUSTMENTS)

MAP 128 LOT 82
ANDREA JAMES REALTY, LLC
24 APPLE TREE GREEN
NASHUA, NH 03082-0218
BK. 8719 PG. 2227
ZONE: RA

MAP 128 LOT 31
ANDREA JAMES REALTY, LLC
24 APPLE TREE GREEN
NASHUA, NH 03082-3408
BK. 7234 PG. 1270
ZONE: RA

MAP 128 LOT 33
SEBEC REALTY, LLC
24 APPLE TREE GREEN
NASHUA, NH 03082
BK. 8485 PG. 838
ZONE: HB

MAP 132 LOT 38
ROSCOMMON INVESTMENTS, LLC
147 D.W. HIGHWAY
NASHUA, NH 03080
BK. 9046 PG. 874
ZONE: HB

NASHUA CITY PLANNING BOARD
STAFF REPORT

TO: Nashua City Planning Board
FROM: Linda McGhee, Deputy Planning Manager
FOR: September 10, 2020
RE: **New Business #5 - Subdivision Plan**

I. Project Statistics:

Owners: MG Holdings
Proposal: Three lot subdivision
Location: 1 Morningside Drive
Total Site Area: 0.68 acres 29,714 sf
Existing Zoning: RA-Urban Residence
Surrounding Uses: Residential and Rivier University

II. Background Information:

According to city records, presently on the lot is a single family 2-story home with a basement. There is a pool and shed also on the property.

III. Project Description:

The purpose of this plan is to subdivide the parcel into three residential lots. The existing home will remain on Lot 129 and contain 12,276 sf. Lot 131 will contain 7,822 sf and have an address of 7 Morningside Drive. Lot 132 will contain 9,616 sf and have an address of 11 Morningside Drive. The minimum lot area in the RA zone is 7,500 sf and all lots meet the minimum requirements. The pool and shed will be removed. Underground utilities are being proposed.

Three waivers are being requested. The first waiver is from the requirement to show physical features on site and within 1,000 feet of the subdivision. The applicant has requested a waiver from the requirement to show existing waterlines on the plan.

The final waiver is for sidewalks. While there is a significant need for sidewalks and pedestrian facilities throughout the City of Nashua, Morningside Drive and Taft Street are not on the sidewalk priority list and does not meet the standards for granting a waiver. The site meets the criteria in § 190-212(D) and the owner would be eligible to make a contribution in lieu of sidewalk construction. The applicant has offered to make a contribution in the amount of \$13,576.50, which is based on \$50 per linear foot along the entire frontage of the lots on Morningside Drive, subtracting a driveway width of 36 feet (18 feet per lot for the driveway). If the frontage on Taft Street is included in the sidewalk calculation of \$50 per linear foot (131.90 feet – 18 feet for a driveway), an additional \$5,695.00 contribution (or a total of \$19,271.50) would be required.

City Staff reviewed the plans; comments are attached.

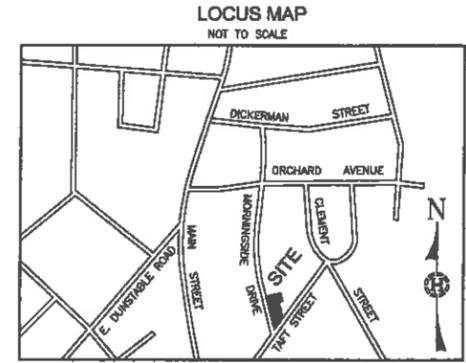
Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet the requirements outlined in the Subdivision NRO § 190-138(G). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, specific reasons should be given. If the Planning Board chooses to approve this plan, staff recommends the following stipulation be made part of that approval:

1. The request for a waiver of § 190-282(B)(9), which requires physical features on site and within 1,000 feet, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
2. The request for a waiver of § 190-282(B)(28), which waterlines to be shown for new subdivisions, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
3. The request for a waiver § 190-212(A)(1), which requires that a sidewalk be located on at least one side of the street, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation. The applicant has agreed to make a contribution in the amount of \$_____ in lieu of sidewalk construction pursuant to §190-212(D)(2), payment to be made prior to recording the plan.
4. Prior to the Chair signing the plan, all minor drafting corrections will be made.
5. Prior to recording the plan, all comments in an e-mail from Joe Mendola, Street Construction Engineer, dated August 31, 2020 shall be addressed to the satisfaction of the Engineering Department.
6. Prior to recording of the plan, all conditions from the Planning Board approval letter will be added to the cover page of the final mylar and paper copies submitted to the City.
7. Prior to recording of the plan, addresses shall be shown on the plan as assigned by the Fire Marshal.
8. Prior to recording the plan, a drainage report shall be submitted to Planning and Engineering staff for review.
9. Stormwater documents and utility easements will be submitted to Planning staff for review and recorded with the plan at the applicant's expense.
10. Prior to the issuance of a building permit, the plan electronic file of the subdivision plan shall be submitted to the City of Nashua.
11. Prior to any work, a pre-construction meeting shall be held and a financial guarantee shall be approved.

REFERENCE PLANS:

1. "ORCHARD HEIGHTS - HOUSE LOTS & BUNGALOW LOTS - OWNED BY - MASSACHUSETTS LAND CO.," SCALE: 1"=40' DATED AUGUST 1915 (H.C.R.D. PLAN #329A).
2. "MORNING SIDE PARK - MAIN STREET NASHUA NH" SCALE: 1"=40' DATED DECEMBER 2, 1955 AND LAST REVISED 2/12/59 (H.C.R.D. PLAN # 1720)
3. "LAND OF - ETHEL M. LANGSTON - MAIN STREET & ORCHARD AVENUE - NASHUA-N.H." SCALE: 1"=40' DATED MAY 20, 1940 AND LAST REVISED SEPTEMBER 7, 1940 (H.C.R.D. PLAN #)
4. "LAND IN NASHUA, NH - DRAWN TO SHOW - LOT LINE RELOCATION - OWNED BY - THOMAS & CAROL GRASSO - 408 MAIN ST. NASHUA NH - & ROBERT & CAROL DROUIN - 8 TAFT STREET NASHUA, NH" SCALE: 1"=30' DATED JANUARY 1989 (H.C.R.D. PLAN # 23205).

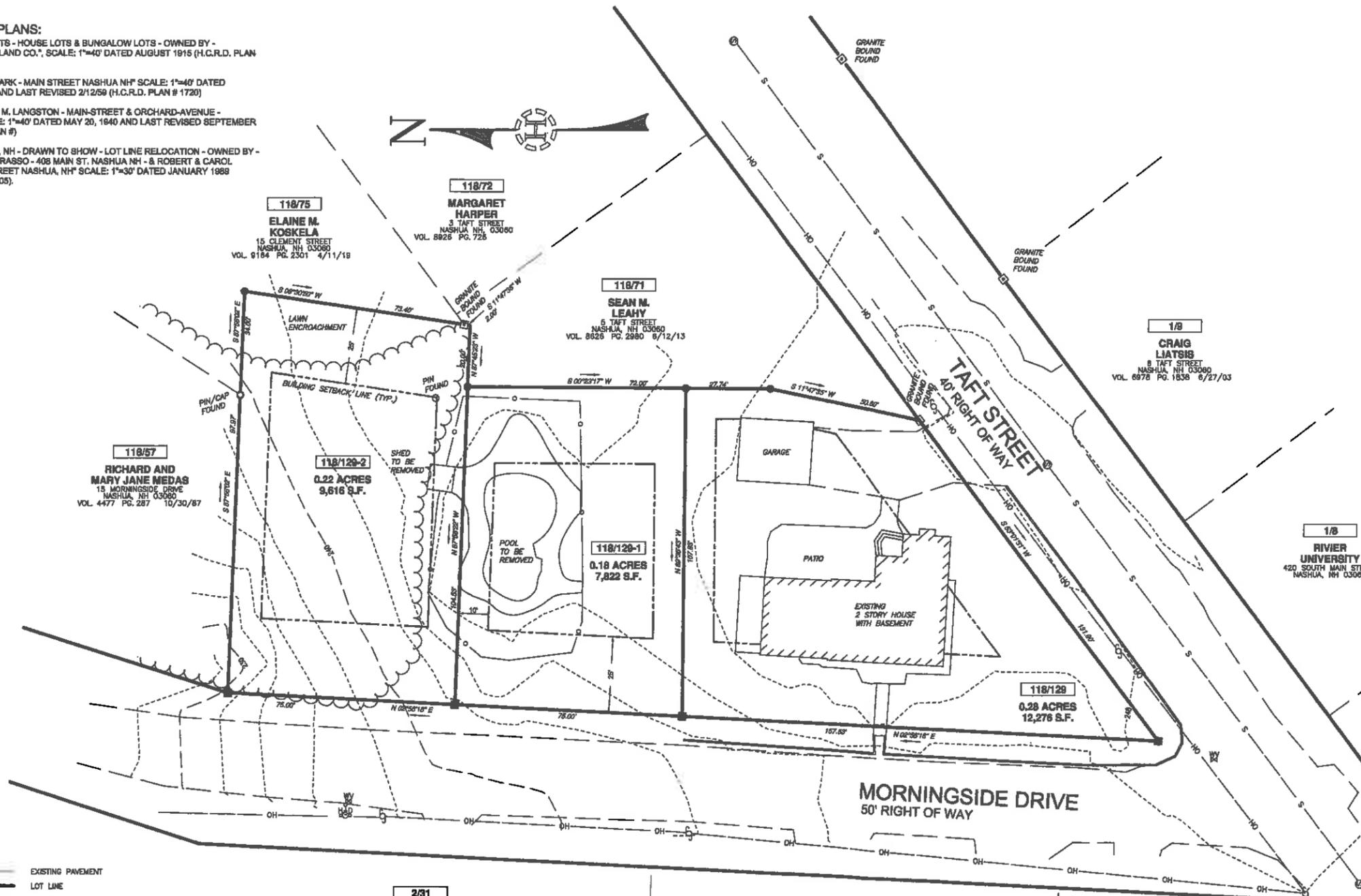


NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT A 3 LOT SUBDIVISION OF TAX MAP 118 LOT 129.
2. THE OWNER OF RECORD OF TAX MAP 118 LOT 129 IS MG HOLDINGS LLC, P.O. BOX 10088 BEDFORD, NH 03110 (SEE H.C.R.D. BK. 2885 PG. 1251 DATED 3/16/20).
3. THE TOTAL AREA OF TAX MAP 118 LOT 129 IS 0.68 ACRES OR 29,714 S.F.
4. TAX MAP 118 LOT 129 IS LOCATED IN THE R-A ZONE, MINIMUM LOT AREA IS 7,500 S.F. WITH 60' OF FRONTAGE. MINIMUM BUILDING SETBACKS ARE 25' FRONT, 10' SIDE AND 25' REAR.
5. THIS PLAN IS THE RESULT OF AN ACTUAL FIELD SURVEY PERFORMED BY THIS OFFICE DURING THE MONTHS OF APRIL AND MAY 2020.
6. TAX MAP 118 LOT 129 DOES NOT LIE WITHIN A SPECIAL FLOOD HAZARD ZONE PER FIRM # 33011C0552E EFFECTIVE DATE 4/18/11.
7. UNDERGROUND UTILITIES DEPICTED HEREON ARE APPROXIMATE. THIS SITE IS SERVICES BY MUNICIPAL SEWER AND PENNICHUCK WATER WORKS.
8. PARKING REQUIREMENTS FOR SINGLE FAMILY RESIDENTIAL ARE TWO 10' x 20' OFF STREET PARKING PLACES PER LOT.
9. FUTURE BUILDING CONSTRUCTION SHALL INCORPORATE FOUNDATION DRAINAGE SYSTEMS.
10. ANY WORK WITHIN THE RIGHT OF WAY OF ANY STREETS SHALL COMPLY WITH THE N.R.D. SECTION 285-13.
11. PROPOSED UTILITY LINES ARE TO BE UNDERGROUND.
12. A MINIMUM OF 2 STREET TREES PER LOT SHALL BE LOCATED ALONG THE STREET FRONTAGE WITH A 2 FEET MINIMUM CALCULATION.

WETLAND CERTIFICATION:

AN ONSITE INVESTIGATION FOR THE PURPOSE OF DELINEATING WETLANDS WAS CONDUCTED BY SPENCER TATE DURING THE MONTH OF MAY 2020 IN ACCORDANCE WITH THE TECHNIQUES OUTLINES IN THE ARMY CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, TECHNICAL REPORT Y-87-1 AND THE NORTH EAST REGIONAL SUPPLEMENT. THIS INVESTIGATION REVEALED THAT THERE WERE NO WETLANDS ON THE SITE.



- LEGEND:**
- EXISTING PAVEMENT
 - LOT LINE
 - BUILDING SETBACK LINE
 - FENCE
 - CONCRETE
 - GRANITE CURB
 - TREE LINE
 - 2' CONTOUR INTERVAL
 - 10' CONTOUR INTERVAL
 - UNDERGROUND SEWER LINE
 - OVERHEAD ELECTRIC LINE

- WATER VALVE
- ELECTRIC UTILITY POLE
- PIV/CAP TO BE SET
- GRANITE BOUND TO BE SET
- SEWER MANHOLE

2/31
JOSEPH L. BINGHAM
 3 MORNINGSIDE DRIVE
 NASHUA, NH 03080
 VOL. 4546 PG. 289 12/14/87

2/28
SUNLIN V. & SUNETA S. KULKARIN
 933 NE SHIMMEL STREET
 HILLSBORO, NH 07124-5010
 VOL. 5800 PG. 341 12/22/84

2/28
ROBERT G. DROUIN REVOCABLE TRUST
 8 TAFT STREET
 NASHUA, NH 03060
 VOL. 8322 PG. 1848 5/27/11



OWNER'S SIGNATURES

DATE _____ MG HOLDINGS LLC

APPROVED - NASHUA PLANNING BOARD

DATE _____ CHAIR OF NASHUA PLANNING BOARD

DATE _____ SECRETARY OF NASHUA PLANNING BOARD

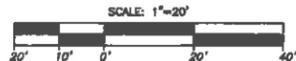
CERTIFICATION:

"I HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND AND HAS A MAXIMUM ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND (1:10,000) ON ALL PROPERTY LINES WITHIN AND BORDERING THE SUBJECT PROPERTY."

SUBDIVISION PLAN
 PREPARED FOR:
MG HOLDINGS
 1 MORNING SIDE DRIVE
TAX MAP 118 LOT 129
NASHUA, NEW HAMPSHIRE

JUNE 18, 2020

HIGGINSON LAND SERVICES
 LAND SURVEYING - SEPTIC SYSTEM DESIGNS - PERMITTING
 76 PATTERSON HILL ROAD HENNIKER, NH 03242
 TEL: 603-880-8412 | NOTE BOOK #16 | JOB #625



| REV. | DATE | DESCRIPTION | BY |
|------|------|-------------|----|
| | | | |

NASHUA CITY PLANNING BOARD
STAFF REPORT

TO: Nashua City Planning Board
FROM: Linda McGhee, Deputy Planning Manager
FOR: September 24, 2020
RE: **New Business #3 - Conservation Subdivision**

I. Project Statistics:

Owner: B & A Construction LLC
Proposal: Conservation subdivision with 10 lots and 1 open space parcel
Location: 32 Groton Road
Total Site Area: 10.375 acres
Existing Zoning: R40-Rural Residence
Surrounding Uses: Residential, conservation land, earth mining operation

II. Background Information:

Existing property has been used by a construction company and landscaping provider. In the past it had been used as a sawmill.

On June 9, 2020 the Zoning Board of Adjustment granted a use variance to remove three non-conforming structures and construct a new barn/workshop/office for a carpentry shop with an accessory residential unit on second floor. On August 25, 2020 the ZBA granted a variance for minimum lot area, 40,000 sf required, between 21,400 sf and 26,050 sf proposed, for individual sewage disposal systems. Approval letters and minutes are attached.

III. Project Description:

The purpose of this plan is to subdivide Lot 265 into 10 lots and one open space parcel. The conservation area will contain 3.820 acres. Access to the proposed lots will be provided by a public paved road ending in a cul-de-sac. Landscaping and a sidewalk are being proposed. The lots will be serviced by propane, underground utilities, individual septic tanks and a private community water system. The applicant has prepared a stormwater management report and indicates that the post-development volumes and peak rates of runoff leaving the site will be maintained and/or reduced from the pre-development condition.

One lot will contain the carpentry shop and the other lots will have single family homes. A Traffic Impact Worksheet has been submitted and it demonstrates that a formal Traffic Impact Report (TIR) is not required since the daily and peak hour trip estimates are below the TIR threshold values. One waiver is being requested from the requirement to show existing conditions within 1,000 feet of the subdivision.

City staff reviewed the plan; comments are attached.

IV. Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet, the requirements outlined in the Subdivision NRO § 190-138(G). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, specific reasons should be given. If the Planning Board chooses to approve this plan, staff recommends the following stipulations be made part of that approval:

1. The request for a waiver of § 190-282(B)(9), which requires an existing conditions plan, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
2. Prior to the Chair signing the plan, all minor drafting corrections will be made
3. Prior to the Chair signing the plan, all comments in an e-mail from Thomas Lacroix, Staff Engineer dated September 10, 2020 shall be addressed to the satisfaction of the Engineering Department.
4. Prior to Chair signing the plan, all comments in an e-mail from Mark Rapaglia, Inspector/Investigator dated July 8, 2020 shall be addressed to the satisfaction of the Fire Marshal's Office.
5. Stormwater documents shall be submitted to the Planning Department and Corporation Counsel for review and approval and recorded with the plan.
6. Prior to issuance of a building permit, the applicant shall provide a guarantee for the subdivision improvements, including pavement, drainage infrastructure, site landscaping (not including individual unit landscaping), lighting. The applicant's professional engineer shall provide an estimate of the costs of the improvements for review by the City Engineer who shall determine the guarantee amount. The guarantee shall be in a form acceptable to the City's Corporation Counsel. Reductions in the guarantee (bond, letter of credit or other form of guarantee) shall be processed, from time to time, in the customary manner.
7. Prior to the issuance of a building permit, the plan electronic file of the subdivision plan shall be submitted to the City of Nashua
8. Prior to the issuance of the first certificate of occupancy, the applicant shall complete the road improvements to the base course of pavement.
9. Prior to 75 % occupancy, all subdivision improvements shall be substantially completed; provided, that paving may be completed to base course and landscaping may be completed as seasonally permitted.

10. Prior to issuance of the final certificate of occupancy for the development, an as-built plan locating all roads, driveways, units, other buildings, utilities and site landscaping shall be completed by a professional engineer and submitted to the Planning Department. The as-built plan shall include a statement that all construction was generally completed in accordance with the approved subdivision plan and applicable local regulations. Road and sidewalk construction shall be to base course, with final course pavement remaining bonded until completion.
11. Prior to any work and a pre-construction meeting, a financial guarantee shall be approved.

REFERENCE PLAN:

*LOT LINE ADJUSTMENT PLAN - TAX MAP D LOTS 5 & 265 - (26 & 32 GROTON ROAD) - NASHUA, NEW HAMPSHIRE - PREPARED FOR AND LAND OF (LOT D-5):
 - B & A CONSTRUCTION, LLC - AND LAND OF (LOT D-265) - THE TERRELL-HOLT FAMILY REVOCABLE TRUST-2020, SCALE: 1"=60', DATED JANUARY 6, 2020 AND LAST REVISED 02/05/20, BY FIELDSTONE LAND CONSULTANTS, PLLC. RECORDED IN THE H.C.R.D. AS PLAN #40595.

CERTIFICATION:

"I HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND PER THE PRECISION AND ACCURACY STANDARDS FOR AN URBAN CLASSIFICATION SURVEY AS SPECIFIED IN THE NEW HAMPSHIRE LAND SURVEYOR'S ADMINISTRATIVE RULES (LAN 503.04) AND HAS A MAXIMUM ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND (1:10,000) ON ALL PROPERTY LINES WITHIN AND BORDERING THE SUBJECT PROPERTY."

DATE: 6/30/20



LEGEND:

EXISTING FEATURES

- 2-37-1 TAX MAP AND LOT NUMBER
- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- ADJUTING LOT LINE
- MINIMUM BUILDING SETBACK LINE
- SEPTIC SYSTEM SETBACK
- EDGE OF PAVED ROAD
- EDGE OF GRAVEL ROAD
- STONE WALL

- EXISTING BUILDING
- IRON PIPE FOUND
- IRON PIN FOUND
- DRILL HOLE FOUND
- GRANITE BOUND FOUND
- FIELD STONE BOUND FOUND
- DRILL HOLE SET
- EXISTING WELL

- PROPOSED FEATURES
- GRANITE BOUND [TBS]
- IRON PIN [TBS]
- STREET ADDRESS
- DRAINAGE EASEMENT

ABUTTERS:

MAP D LOT 5
ERIC SCHEUER REV. TRUST OF 2015
26 GROTON RD
NASHUA, NH 03062
BK.9273 PG.2648 3/24/20
(32 GROTON ROAD)

MAP D LOT 7
CMJ LEASING CORP
171 MERRIMEN ST
DRACUT, MA 01826-5439
BK.8255 PG.2021 10/28/10
(40 GROTON ROAD)

MAP D LOT 516
CITY OF NASHUA
228 MAIN STREET
NASHUA, NH 03060
BK.8267 PG.1675 11/29/10
(GROTON ROAD)

MAP D LOT 801
TERRELL-HOLT FAMILY REV. TRUST
18 GROTON RD
NASHUA, NH 03062
BK.9338 PG.152 1/25/14
(18/ GROTON ROAD)

MAP D LOT 618
JENNIFER N. & JOSEPH C. RIPLEY
19 GROTON ROAD
NASHUA, NH 03062
BK.8245 PG.2271 12/20/19
(17 GROTON ROAD)

MAP D LOT 379
CATHERINE E. & ROBERT E. HARTT
19 GROTON ROAD
NASHUA, NH 03062
BK.7742 PG.1217 9/25/06
(19 GROTON ROAD)

MAP D LOT 23
FIELDSTONE PROPERTIES, INC
179 ANNESTY STREET
NASHUA, NH 03064
BK.9133 PG.205 12/12/18
(35 GROTON ROAD)

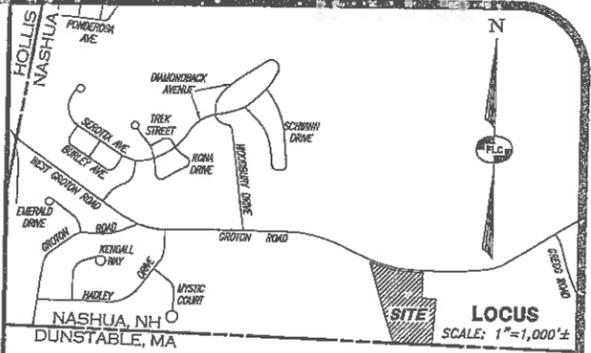
DUNSTABLE, MA
MAP 5 LOT 3
DUNSTABLE RURAL LAND TRUST
C/O GEORGE TRULLY
401 HOLLIS STREET
DUNSTABLE, MA 01827
BK.8862 PG.282 11/13/97
(MAIN STREET)

DENSITY CALCULATIONS:
 REQUIRED: 1 DWELLING UNIT PER 1 ACRE = TOTAL DWELLING UNITS.
 CALCULATION: TOTAL EXISTING GROSS LAND AREA 451,937 S.F. = 40.607
 S.F. (1 PROPOSED CONVENTIONAL LOT) = 411,330 S.F. (2,442 ACRES)
 MAXIMUM NUMBER OF DWELLINGS UNITS REQUIRED: 9 DWELLING UNITS.
 PROVIDED: 9 DWELLING UNITS.

CONSERVATION AREA CALCULATIONS:
 REQUIRED: A MINIMUM OF 40% OF THE GROSS LAND AREA SHALL BE
 DESIGNATED AS CONSERVATION AREA.
 CALCULATION: TOTAL EXISTING GROSS LAND AREA 451,937 S.F. = 40.607
 S.F. (1 PROPOSED CONVENTIONAL LOT) = 411,330 S.F. X 0.40 =
 164,532 S.F. (3.777 ACRES).
 OPEN SPACE PROVIDED: 166,403 S.F. (3.820 ACRES).

NOTES CONTINUED:

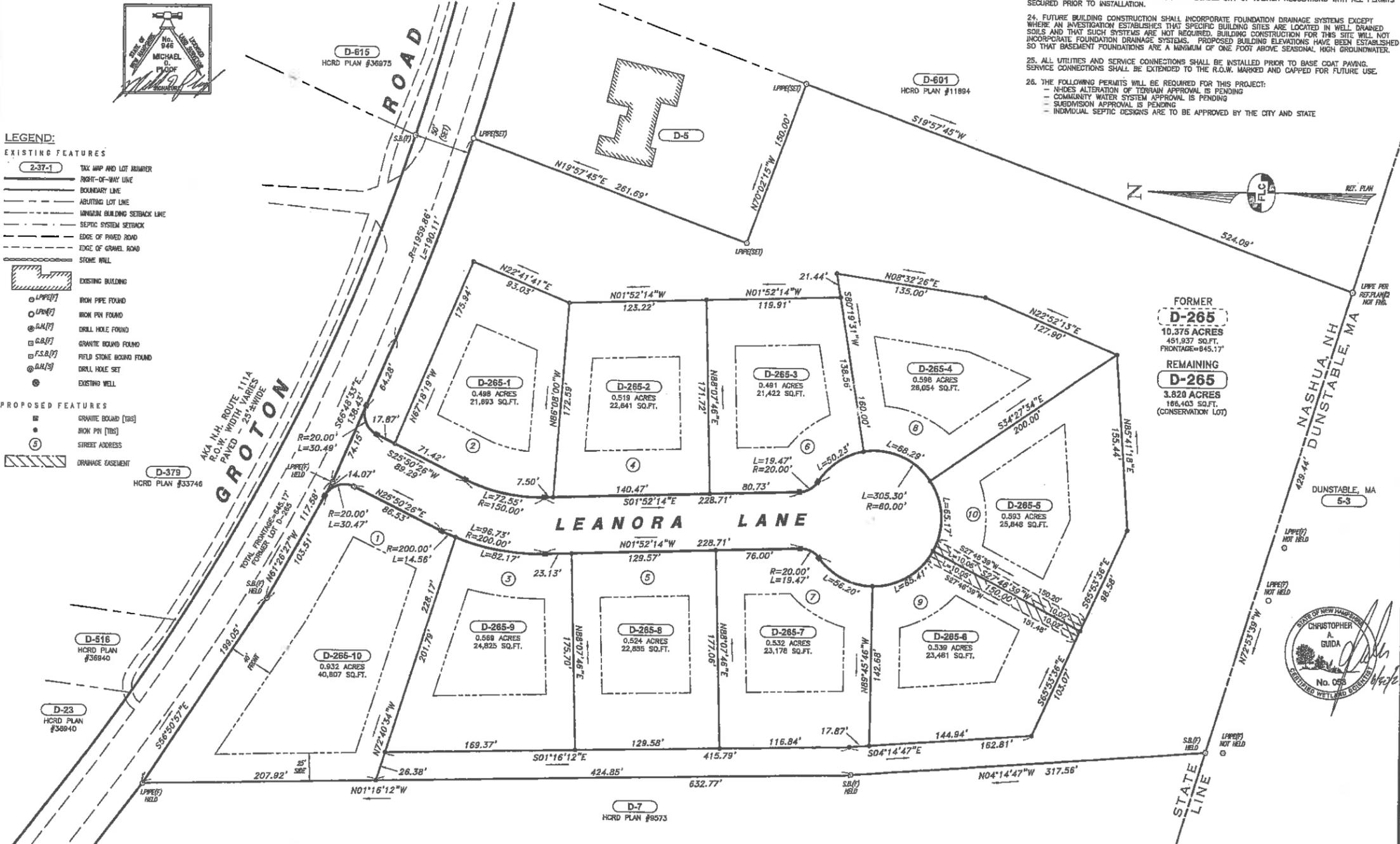
18. TO THE BEST OF MY KNOWLEDGE AND BELIEF, THERE ARE NO KNOWN EASEMENTS, RESTRICTIONS OR ENCUMBRANCES ON THE PROPERTIES OTHER THAN THOSE SHOWN OR NOTED.
19. AN EASEMENT IS RESERVED ALONG THE FRONTAGE LINE OF EACH LOT, BEGINNING AT THE ROAD ROW AND PARALLEL TO THE ROW, 10 FEET WIDE AND 10 FEET DEEP, FOR PURPOSE OF UTILITY PLACEMENT. THE LOCATIONS ARE TO BE THE FUTURE TRANSFORMER PAD SITES, WHICH FINAL PLACEMENT IS TO BE DECIDED AT A LATER DATE BY THE UTILITY COMPANIES. THE FINAL EASEMENT LOCATIONS WILL BE CENTERED ON THE INSTALLED PAD SITES.
20. THE USE OF FERTILIZERS AND PESTICIDES ON THIS PROJECT WILL FOLLOW NHDES PERMITTING REQUIREMENTS AND BEST MANAGEMENT PRACTICES.
21. ONE CONSERVATION MARKER WILL BE SET AT THE REAR BOUNDARY OF EACH LOT AS WELL AS THE REAR LOT CORNERS TO PREVENT INDIVIDUAL LAND OWNERS FROM ENCRoUCHING INTO THE CONSERVATION LOT.
22. A VARIANCE WAS GRANTED ON JUNE 9, 2020 FROM LAND USE CODE SECTION 190-15, TABLE 15-1 (#90) TO REMOVE THREE NON-CONFORMING STRUCTURES AND CONSTRUCT A NEW BARN/WORKSHOP/OFFICE FOR A CARPENTRY SHOP WITH AN ACCESSORY RESIDENTIAL UNIT ON SECOND FLOOR.
23. ALL SIGNAGE SHALL CONFORM TO THE APPLICABLE CITY OF NASHUA REGULATIONS WITH ALL PERMITS SECURED PRIOR TO INSTALLATION.
24. FUTURE BUILDING CONSTRUCTION SHALL INCORPORATE FOUNDATION DRAINAGE SYSTEMS EXCEPT WHERE AN INVESTIGATION ESTABLISHES THAT SPECIFIC BUILDING SITES ARE LOCATED IN WELL DRAINED SOILS AND THAT SUCH SYSTEMS ARE NOT REQUIRED. BUILDING CONSTRUCTION FOR THIS SITE WILL NOT INCORPORATE FOUNDATION DRAINAGE SYSTEMS. PROPOSED BUILDING ELEVATIONS HAVE BEEN ESTABLISHED SO THAT BASEMENT FOUNDATIONS ARE A MINIMUM OF ONE FOOT ABOVE SEASONAL HIGH GROUNDWATER.
25. ALL UTILITIES AND SERVICE CONNECTIONS SHALL BE INSTALLED PRIOR TO BASE COAT PAVING. SERVICE CONNECTIONS SHALL BE EXTENDED TO THE R.O.W. MARKED AND CAPPED FOR FUTURE USE.
26. THE FOLLOWING PERMITS WILL BE REQUIRED FOR THIS PROJECT:
 - NHDES ALTERATION OF TERRAIN APPROVAL IS PENDING
 - COMMUNITY WATER SYSTEM APPROVAL IS PENDING
 - SUBDIVISION APPROVAL IS PENDING
 - INDIVIDUAL SEPTIC DESIGNS ARE TO BE APPROVED BY THE CITY AND STATE



NOTES:

1. THE OWNER OF RECORD FOR TAX MAP LOT D-265 IS B & A CONSTRUCTION LLC - 341 SILVER LAKE ROAD, HOLLIS, NH 03049. THE DEED REFERENCE FOR THE PARCEL IS VOL.9286 PG.2750 DATED APRIL 24, 2020 IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS.
2. THE PURPOSE OF THIS PLAN IS TO SUBDIVIDE TAX MAP PARCEL D-265 INTO A CONSERVATION SUBDIVISION CONSISTING OF 9 RESIDENTIAL LOTS AND 1 CONVENTIONAL LOT.
3. THE TOTAL AREA OF TAX MAP PARCEL D-265 IS 10.375 ACRES OR 451,937 SQ. FT.
4. LOT NUMBERS REFER TO THE CITY OF NASHUA ASSESSORS MAP D.
5. ZONING FOR THE ENTIRE PARCEL IS R-40 RURAL RESIDENCE.

| | REQUIRED-CONVENTIONAL | REQUIRED-CONSERVATION |
|----------------------|-----------------------|-----------------------|
| MIN. LOT AREA | 40,000 SF | NONE |
| MIN. LOT WIDTH | 150 FT. | NONE |
| MIN. LOT FRONTAGE | 120 FT. | NONE |
| MIN. LOT DEPTH | 125 FT. | NONE |
| MIN. FRONT SETBACK | 40 FT. | 40 FT. |
| MIN. SIDE SETBACK | 25 FT. | 25 FT. |
| MIN. REAR SETBACK | 50 FT. | 35 FT. |
| MAX. BUILDING HEIGHT | 2.5 FT. | 2.5 FT. |
| MAX. STORIES | 75% | N/A |
| CONSERVATION AREA | N/A | 40% |
- THIS PROJECT PROPOSES A CONSERVATION AREA OF 3.820 ACRES OR 166,403 S.F. THE SITE IS NOT LOCATED WITHIN THE WATER SUPPLY PROTECTION DISTRICT.
6. THE SURFACE FEATURES AND BOUNDARY INFORMATION SHOWN WAS DEVELOPED FROM THE REFERENCE PLAN CITED AND A PRECISE FIELD SURVEY BY THIS OFFICE DURING THE MONTH OF JUNE 2019. HORIZONTAL ORIENTATION IS BASED ON REFERENCE PLAN #1, VERTICAL DATUM IS NASHUA CITY DATUM. REFERENCE BENCHMARK IS STANDARD USGS SURVEY DISK B 200 1922, LOCATED ON THE SOUTH SIDE OF NH RT.111-A, 285 FT. SOUTHEAST OF THE HOLLIS/NASHUA TOWN LINE. THE NASHUA CITY DATUM ELEV=109.83 CONVERTED FROM NAVD83 (1988.00 (NAVD83)-88.77=109.83(NASHUA CITY)).
7. THE SITE IS CURRENTLY SERVICED BY OVERHEAD UTILITIES. THE PROPOSED LOTS WILL BE SERVICED BY UNDERGROUND UTILITIES, INDIVIDUAL SEPTIC SYSTEMS AND A PRIVATE COMMUNITY WATER SYSTEM.
8. PERMANENT MARKERS ARE TO BE SET AT ALL LOT CORNERS AND STONE BOUNDS AT ALL POINTS OF CURVATURE AND TANGENCY ALONG THE RIGHT-OF-WAY BY A LICENSED LAND SURVEYOR.
9. THE SUBJECT PARCEL IS NOT LOCATED IN A FLOOD HAZARD AREA AS DETERMINED FROM THE FLOOD INSURANCE STUDY (FIRM), HILLSBOROUGH COUNTY, CITY OF NASHUA, NEW HAMPSHIRE, COMMUNITY NO. 330097, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, MAP NUMBER: 33011C0634D, DATED: SEPTEMBER 25, 2009.
10. PARKING: A MINIMUM OF TWO PARKING SPACES WILL BE PROVIDED FOR EACH NEW LOT.
11. ALL REQUIRED STREET AND UTILITY IMPROVEMENTS SHALL BE COMPLETED TO THE SATISFACTION OF THE CITY ENGINEER.
12. PUBLIC STREET RESTORATION WORK SHALL BE IN ACCORDANCE WITH N.R.O. SEC. 285-13. STREET AND UTILITY IMPROVEMENTS SHALL COMPLY WITH ALL APPLICABLE SECTIONS OF THE CITY OF NASHUA REVISED ORDINANCES (N.R.O.).
13. LANDSCAPING SHALL CONFORM TO ARTICLE XXVII OF THE CITY OF NASHUA LAND USE CODE.
14. PRIOR TO ANY WORK BEING CONDUCTED A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD WITH THE PLANNING STAFF AND OTHER CITY DEPARTMENTS AS NECESSARY TO REVIEW WORK PROPOSED.
15. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN COMPILED IN PART FROM PLANS OF RECORD AND FIELD LOCATION. THE LOCATION OF UNDERGROUND UTILITIES SHOULD BE CONSIDERED APPROXIMATE AND SHOULD BE FIELD VERIFIED PRIOR TO ANY EXCAVATION OR CONSTRUCTION ACTIVITIES.
16. THE EXISTING LOAM PILES ON SITE WILL BE UTILIZED IN RECLAIMING THE PROJECT.
17. JURISDICTIONAL WETLANDS WERE NOT FOUND ON THE SUBJECT PARCEL PER AN ON-SITE FIELD INVESTIGATION BY CHRISTOPHER A. GUIDA, C.W.S. IN OCTOBER 2019 IN ACCORDANCE WITH THE "CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, TECHNICAL REPORT Y-87-1, DATED JANUARY 1987".



FORMER
D-265
 10.375 ACRES
 451,937 SQ.FT.
 FRONTAGE=845.17'

REMAINING
D-265
 3.820 ACRES
 166,403 SQ.FT.
 (CONSERVATION LOT)



SUBDIVISION PLAN
MEADOW VIEW ESTATES
 TAX MAP D LOT 265
 (32 GROTON ROAD)
 NASHUA, NEW HAMPSHIRE
 PREPARED FOR AND LAND OF:
B & A CONSTRUCTION LLC
 341 SILVER LAKE ROAD, HOLLIS, NH 03049
 SCALE: 1" = 50' JUNE 30, 2020

Surveying ♦ Engineering ♦ Land Planning ♦ Permitting ♦ Septic Designs

FIELDSTONE
 LAND CONSULTANTS, PLLC

206 Elm Street, Milford, NH 03055
 Phone: (603) 672-5456 Fax: (603) 413-5456
 www.FieldstoneLandConsultants.com

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FILE: 2322S00L.DWG PROJ. NO. 2322.00 SHEET NO. SB-1 PAGE NO. 2 OF 10

STREETS, RIGHTS-OF-WAY AND OTHER PUBLIC USE AREAS ARE HEREBY DEDICATED TO THE CITY OF NASHUA.

B & A CONSTRUCTION LLC DATE: _____

THE UNDERSIGNED DOES HEREBY AGREE TO PERFORM ALL OF THE SITE IMPROVEMENTS AS SHOWN ON THIS PLAN AND AS CONDITIONED OR STIPULATED BY THE NASHUA CITY PLANNING BOARD.

B & A CONSTRUCTION LLC DATE: _____

APPROVED BY NASHUA PLANNING BOARD

CHAIRMAN: _____ DATE: _____
 SECRETARY: _____ DATE: _____

ABUTTERS:

MAP D LOT 5
ERIC SCHEUER REV. TRUST OF 2015
28 GROTON RD
NASHUA, NH 03062
BK.9273 PG.2648 3/24/20
(32 GROTON ROAD)

MAP D LOT 7
CMI LEASING CORP
1471 METHUEN ST
DRACUT, MA 01826-5439
BK.8256 PG.2021 10/29/10
(40 GROTON ROAD)

MAP D LOT 516
CITY OF NASHUA
229 MAIN STREET
NASHUA, NH 03060
BK.8267 PG.1675 11/29/10
(GROTON ROAD)

MAP D LOT 601
TERRELL-HOLT FAMILY REV. TRUST
TERRELL-HOLT, PATRICIA TRUSTEE
18 GROTON RD
NASHUA, NH 03062
BK.8836 PG.152 1/25/14
(18 GROTON ROAD)

MAP D LOT 615
JENNIFER N. & JOSEPH C. RIPLEY
17 GROTON ROAD
NASHUA, NH 03062
BK.8245 PG.2271 12/20/19
(17 GROTON ROAD)

MAP D LOT 379
CATHERINE E. &
ROBERT E. HARTT
19 GROTON ROAD
NASHUA, NH 03062
BK.7742 PG.1217 8/25/06
(19 GROTON ROAD)

MAP D LOT 23
ETCHSTONE PROPERTIES, INC
179 AMHERST STREET
NASHUA, NH 03064
BK.9133 PG.205 12/12/18
(35 GROTON ROAD)

DUNSTABLE, MA
MAP 5 LOT 3
DUNSTABLE RURAL LAND TRUST
C/O GEORGE TULLY
401 HOLLIS STREET
DUNSTABLE, MA 01827
BK.8882 PG.282 11/13/97
(MAIN STREET)

LEGEND:

- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- - - - - ABUTTING LOT LINE
- - - - - BUILDING SETBACK LINE
- - - - - EDGE OF PAVED ROAD
- - - - - EDGE OF GRAVEL ROAD
- - - - - EDGE OF TREE LINE
- - - - - 500' 10' CONTOUR INTERVAL
- - - - - 400' 2' CONTOUR INTERVAL
- - - - - OVERHEAD UTILITY LINE
- (S.F.) GRANITE BOUND FOUND
- (P.P.F.) IRON PIPE FOUND
- (P.P.F.) UTILITY POLE, GUY & LIGHT
- WELL
- SINGLE SIGN POST
- (D-5) TAX MAP & LOT NUMBER
- (R) STREET ADDRESS
- (R) TO BE REMOVED
- (R) TEST PIT LOCATION
- (R) BENCHMARK

REFERENCE PLAN:

"LOT LINE ADJUSTMENT PLAN - TAX MAP D LOTS 5 & 265 - (26 & 32 GROTON ROAD) - NASHUA, NEW HAMPSHIRE - PREPARED FOR AND LAND OF (LOT D-5): - B & A CONSTRUCTION, LLC - AND LAND OF (LOT D-265): - THE TERRELL-HOLT FAMILY REVOCABLE TRUST-2005". SCALE: 1"=60', DATED JANUARY 9, 2020 AND LAST REVISED 02/05/20, BY FIELDSTONE LAND CONSULTANTS, PLLC, RECORDED IN THE H.C.R.D. AS PLAN #40995.

CERTIFICATION:

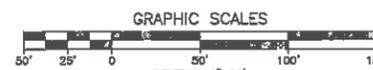
"I HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND FOR THE PRECISION AND ACCURACY STANDARDS FOR AN URBAN CLASSIFICATION SURVEY AS SPECIFIED IN THE NEW HAMPSHIRE LAND SURVEYOR'S ADMINISTRATIVE RULES (LAN 803.04) AND HAS A MAXIMUM ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND (1:10,000) ON ALL PROPERTY LINES WITHIN AND BORDERING THE SUBJECT PROPERTY."

DATE: 6/30/20



NOTES:

- THE OWNER OF RECORD FOR TAX MAP LOT D-265 IS B & A CONSTRUCTION LLC - 341 SILVER LAKE ROAD, HOLLIS, NH 03049. THE DEED REFERENCE FOR THE PARCEL IS VOL.9285 PG.2750 DATED APRIL 24, 2020 IN THE HILLSBOROUGH COUNTY REGISTRY OF DEEDS
 - THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS FOR TAX MAP LOT D-265.
 - LOT NUMBERS REFER TO THE CITY OF NASHUA ASSESSORS MAP "D".
 - ZONING FOR THE PARCEL IS THE RURAL RESIDENCE DISTRICT (R-40).
- | R-40 ZONE, CONVENTIONAL | REQUIRED | R-40 ZONE, CONSERVATION | REQUIRED |
|-------------------------|-----------|-------------------------|----------|
| MIN LOT AREA | 40,000 SF | | N/A |
| MIN LOT WIDTH | 150 FT | | N/A |
| MIN LOT FRONTAGE | 120 FT | | N/A |
| MIN LOT DEPTH | 125 FT | | N/A |
| MIN FRONT SETBACK | 40 FT | | 40 FT |
| MIN SIDE SETBACK | 25 FT | | 25 FT |
| MIN REAR SETBACK | 50 FT | | 50 FT |
| MAX. BUILDING HEIGHT | 35 FT | | 35 FT |
| MAX. STORES | 2.5 | | 2.5 |
| OPEN SPACE FOR EACH LOT | 75% | | N/A |
| CONSERVATION AREA | N/A | | 40% |
- THE SURFACE FEATURES AND BOUNDARY INFORMATION SHOWN WAS DEVELOPED FROM THE REFERENCE PLAN CITED AND A PRECISE FIELD SURVEY BY THIS OFFICE DURING THE MONTH OF JUNE 2019. HORIZONTAL ORIENTATION IS BASED ON REFERENCE PLAN #1. VERTICAL DATUM IS NASHUA CITY DATUM. REFERENCE BENCHMARK IS STANDARD U.S. SURVEY DISK B 200 1922, LOCATED ON THE SOUTH SIDE OF NH RT.111-A, 265 FT. SOUTHEAST OF THE HOLLIS/NASHUA TOWN LINE. THE NASHUA CITY DATUM ELEV=109.83 CONVERTED FROM NAVD83 (198.80 (NAVD83)-89.77=109.83(NASHUA CITY)).
 - JURISDICTIONAL WETLANDS WERE NOT FOUND ON THE SUBJECT PARCEL PER AN ON SITE FIELD INVESTIGATION BY CHRISTOPHER A. GUIDA, C.W.S. IN OCTOBER 2019 IN ACCORDANCE WITH THE "CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, TECHNICAL REPORT Y-87-1, DATED JANUARY 1987".
 - THE SITE IS NOT LOCATED WITHIN THE WATER SUPPLY PROTECTION DISTRICT.
 - THE SUBJECT PARCEL IS NOT LOCATED IN A FLOOD HAZARD AREA AS DETERMINED FROM THE FLOOD INSURANCE STUDY (FIRM), HILLSBOROUGH COUNTY, CITY OF NASHUA, NEW HAMPSHIRE, COMMUNITY NO. 330087, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, MAP NUMBER: 33011008340, DATED: SEPTEMBER 25, 2008.
 - SOIL TYPE FOR THE ENTIRE SITE IS H8b - HINCKLEY LOAMY SAND WITH SLOPES FROM 3%-8%.
 - THE SITE IS CURRENTLY SERVICED BY OVERHEAD UTILITIES AND BY AN INDIVIDUAL SEPTIC SYSTEM AND WATER WELL.
 - A VARIANCE FROM THE LAND USE CODE, SECTION 190-17 (B), WAS GRANTED AT THE NOVEMBER 27, 2019 ZONING BOARD OF ADJUSTMENT MEETING, ALLOWING TO EXCEED THE MAXIMUM NUMBER OF PRINCIPAL STRUCTURES ON ONE LOT.



EXISTING CONDITIONS PLAN
MEADOW VIEW ESTATES
 TAX MAP D LOT 265
 (32 GROTON ROAD)
 NASHUA, NEW HAMPSHIRE
 PREPARED FOR AND LAND OF:
B & A CONSTRUCTION LLC
 341 SILVER LAKE ROAD, HOLLIS, NH 03049

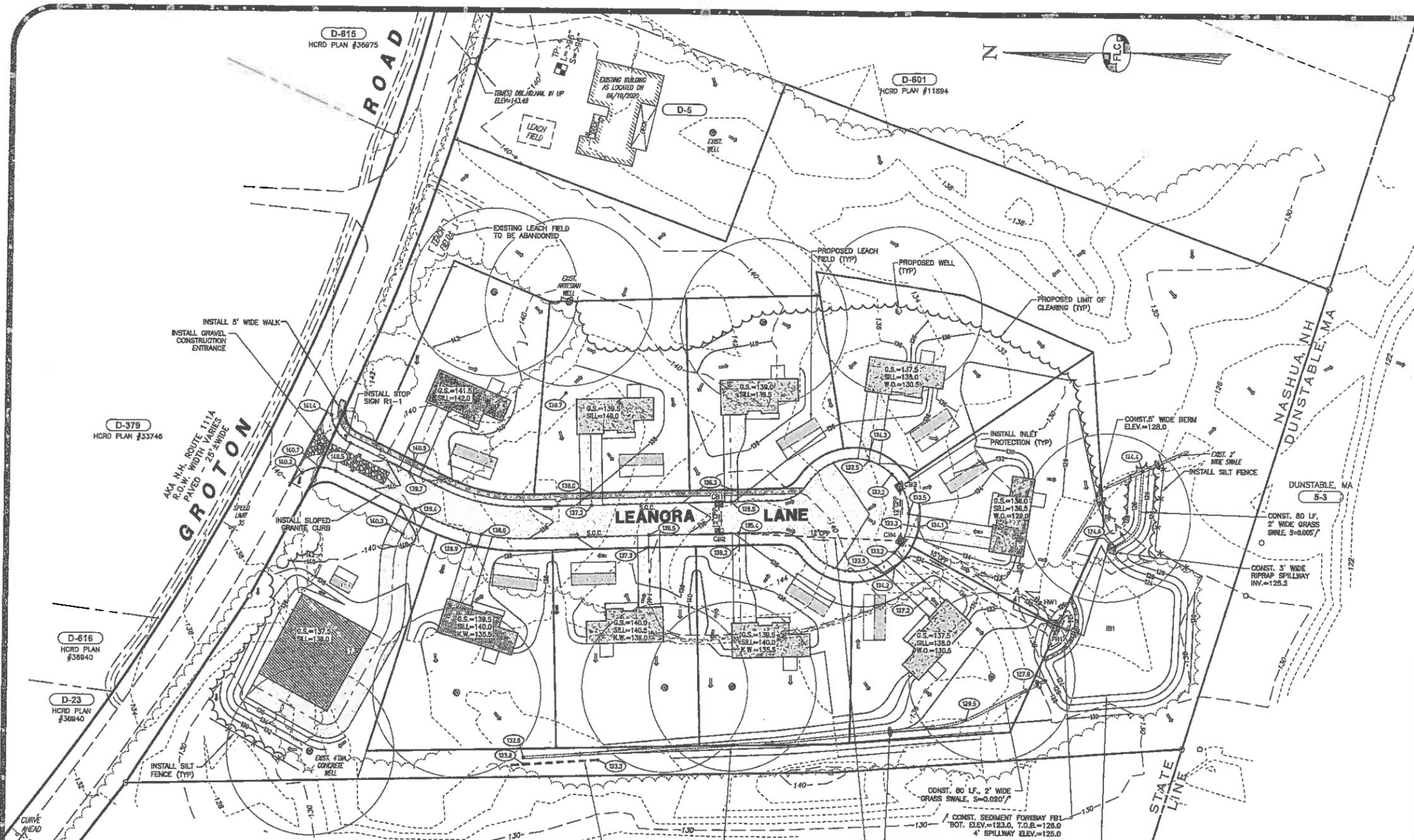
SCALE: 1" = 50' JUNE 30, 2020

Surveying + Engineering + Land Planning + Permitting + Septic Designs



208 Elm Street, Milford, NH 03055
 Phone: (603) 672-5456 Fax: (603) 413-5456
 www.FieldstoneLandConsultants.com

| REV. | DATE | DESCRIPTION | C/O | DR | CK |
|------|------|-------------|-----|----|----|
| | | | | | |



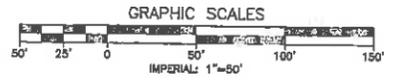
LEGEND:

| EXISTING FEATURES | |
|-------------------|-------------------------------|
| 2-37-1 | TAX MAP AND LOT NUMBER |
| --- | RIGHT-OF-WAY LINE |
| --- | BOUNDARY LINE |
| --- | ADJOINING LOT LINE |
| --- | MINIMUM BUILDING SETBACK LINE |
| --- | SEPTIC SYSTEM SETBACK |
| --- | EDGE OF PAVED ROAD |
| --- | EDGE OF GRAVEL ROAD |
| --- | 10' CONTOUR INTERVAL |
| --- | 2' CONTOUR INTERVAL |
| --- | TREE LINE |
| --- | WIRE FENCE |
| --- | FENCE |
| --- | CHAIN LINK FENCE |
| --- | STONE WALL |
| --- | OVERHEAD UTILITIES |
| --- | EDGE OF EASEMENT |
| --- | BENCHMARK |
| ○ | IRON PIPE FOUND |
| ○ | IRON PIN FOUND |
| ○ | GRILL HOLE FOUND |
| ○ | GRANITE BOUND FOUND |
| ○ | FIELD STONE BOUND FOUND |
| ○ | DRILL HOLE SET |
| ○ | SKIN |
| ○ | EXISTING WELL |
| ○ | EXISTING BUILDING |
| ○ | UTILITY POLE AND SIX WIRE |
| ○ | ROCK |
| ○ | TEST PIT |
| ○ | TO BE REMOVED |

| PROPOSED FEATURES | |
|-------------------|------------------------------|
| --- | 10 FT. CONTOUR |
| --- | 2 FT. CONTOUR |
| --- | SPOT ELEVATION |
| --- | SPOT ELEVATION AT CURB |
| --- | STORM WATER DRAINAGE |
| --- | EDGE OF PAVEMENT |
| --- | SLOPED GRANITE CURB |
| --- | SURFACE WATER FLOW |
| --- | STONE CHECK DAM |
| --- | TO BE REMOVED |
| --- | WELL |
| --- | SWALE |
| --- | TEMPORARY SILT FENCE |
| --- | SIDEWALK |
| --- | EROSION CONTROL STONE |
| --- | PAVED AREA |
| --- | LIMITS OF CLEARING |
| --- | EARTHEN BERM |
| --- | LEACH FIELD AREA |
| --- | REPLACEMENT LEACH FIELD AREA |

ABBREVIATIONS:
 G.S. GARAGE SLAB
 K.W. KNEE WALL
 W.D. WALK OUT BASEMENT

CONTACT DIG SAFE
 72 HOURS PRIOR
 TO CONSTRUCTION
DIGSAFE.COM
 OR DIAL 8 1 1
 CALL 811 - KNOW WHAT'S BELOW



GENERAL CONSTRUCTION NOTES:

1. ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REQUIREMENTS AND SPECIFICATIONS OF THE CITY OF NASHUA.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS AND SHALL VERIFY THAT ALL THE INFORMATION SHOWN HEREON IS CONSISTENT, COMPLETE, ACCURATE, AND CAN BE CONSTRUCTED PRIOR TO AND/OR DURING CONSTRUCTION. FIELDSTONE LAND CONSULTANTS, PLLC, AS THE DESIGN ENGINEER, SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES, ERRORS, OMISSIONS, OR EXISTING UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION SO THAT REMEDIAL ACTION MAY BE TAKEN BEFORE PROCEEDING WITH THE WORK.
3. THE CONTRACTOR SHALL CONTACT "DIGSAFE" 72 HOURS PRIOR TO THE START OF CONSTRUCTION (811).
4. EXISTING PAVEMENT SHALL BE SAW-CUT AS NECESSARY. CONTRACTOR SHALL ENSURE A SMOOTH TRANSITION BETWEEN NEW AND EXISTING PAVEMENT.
5. ALL POWER WORK SHALL CONFORM TO EVERSOURCE STANDARDS.
6. ALL TELEPHONE WORK SHALL CONFORM TO CONSOLIDATED COMMUNICATIONS SPECIFICATIONS.
7. SUBSURFACE DISPOSAL SYSTEMS SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH THE NHDES RULES AND REGULATIONS.
8. STREET RESTORATION, IF ANY, SHALL BE IN ACCORDANCE WITH NRC-285-13.
9. ANY ALTERATION OF THIS DESIGN OR CHANGE DURING CONSTRUCTION MAY REQUIRE APPROVAL OF VARIOUS TOWN/CITY BOARDS OR AGENCIES AND SHALL BE DISCUSSED WITH THE OWNER AND FIELDSTONE LAND CONSULTANTS, PLLC PRIOR TO CONSTRUCTION.
10. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE CITY DEPARTMENTS PRIOR TO CONSTRUCTION TO ARRANGE FOR NECESSARY INSPECTIONS.
11. STRUCTURE OFFSETS FROM CENTERLINE ARE TO THE CENTERLINE OF THE GRATE.

D-7
 HCRD PLAN #9573

SEE ROADWAY PROFILE
 FOR STORM SEWER DATA

CONST. 80 LF, 2' WIDE GRASS SWALE, S=0.020'/'

CONST. 400 LF, 2' WIDE GRASS SWALE, S=0.0075'/'

CONST. 80 LF, 2' WIDE GRASS SWALE, S=0.020'/'

CONST. SEDIMENT FOREBAY F&I BOT. ELEV.=123.0, T.O.B.=128.0 4' SPILLWAY ELEV.=125.0

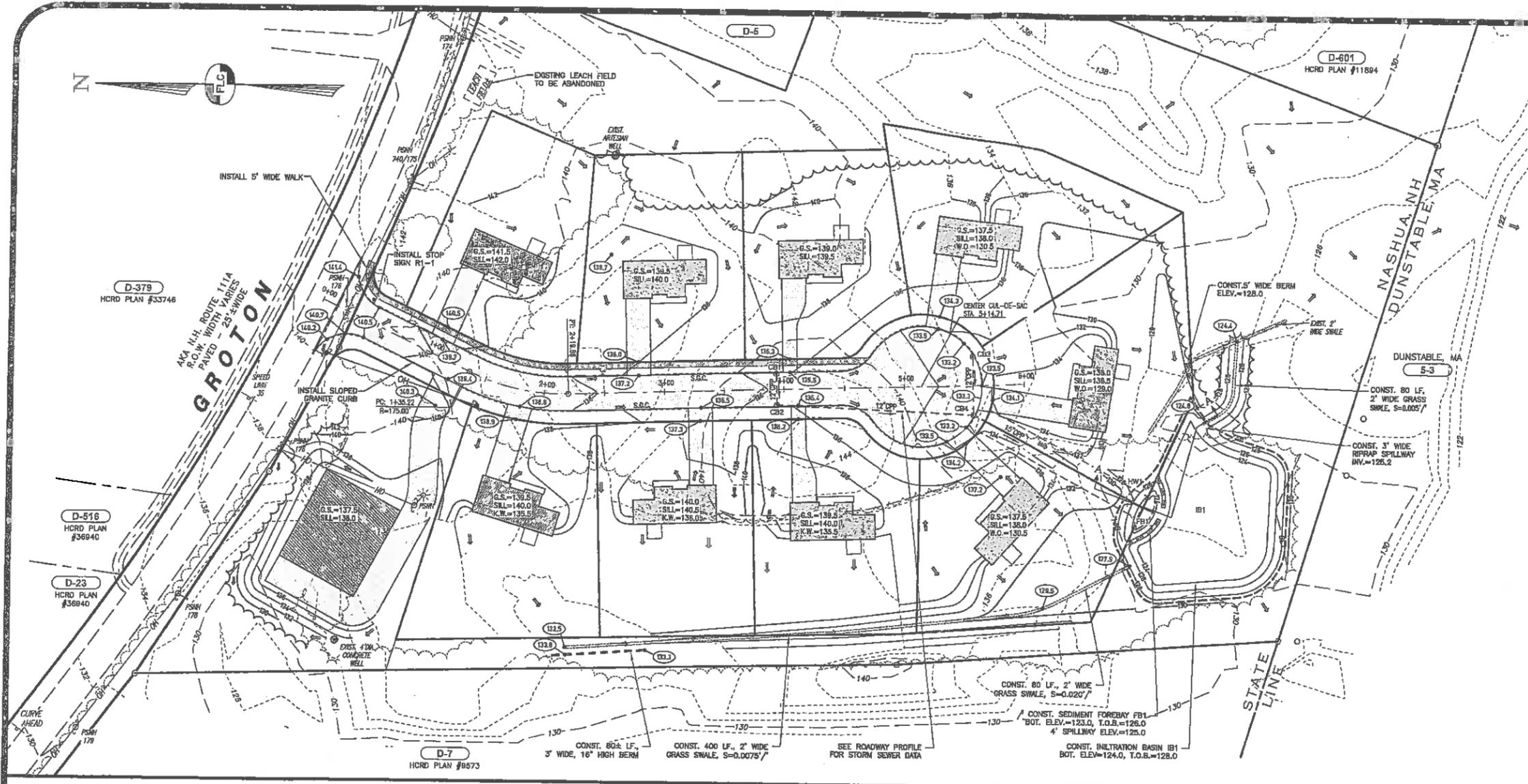
CONST. INfiltration BASIN 191 BOT. ELEV.=124.0, T.O.B.=128.0

GRADING & EROSION CONTROL PLAN
MEADOW VIEW ESTATES
 TAX MAP D LOT 265
 (32 GROTON ROAD)
 NASHUA, NEW HAMPSHIRE
 PREPARED FOR AND LAND OF:
B & A CONSTRUCTION, LLC
 341 SILVER LAKE ROAD, HOLLIS, NH 03049

SCALE: 1" = 50' JUNE 30, 2020

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206 Elm Street, Milford, NH 03055
 Phone: (603) 672-5456 Fax: (603) 413-5456
 www.FieldstoneLandConsultants.com



LEGEND:

EXISTING FEATURES

- 2-37-1 TAX MAP AND LOT NUMBER
- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- ADJUTING LOT LINE
- MINIMUM BUILDING SETBACK LINE
- SEPTIC SYSTEM SETBACK
- EDGE OF PAVED ROAD
- EDGE OF GRAVEL ROAD
- 5' CONTOUR INTERVAL
- 1' CONTOUR INTERVAL
- TREE LINE
- WIRE FENCE
- FENCE
- CHAIN LINK FENCE
- STORE WALL
- OH OVERHEAD UTILITIES
- EDGE OF EASEMENT
- (L.P.P.F.) IRON PIPE FOUND
- (L.P.P.F.) IRON PIN FOUND
- (D.H.F.) DRILL HOLE FOUND
- (G.S.) GRANITE BOUND FOUND
- (F.S.B.F.) FIELD STONE BOUND FOUND
- (D.H.F.) DRILL HOLE SET
- SIGN
- EXISTING WELL
- EXISTING BUILDING
- UTILITY POLE AND GUY WIRE
- TP: 134 1"=10' TEST PIT

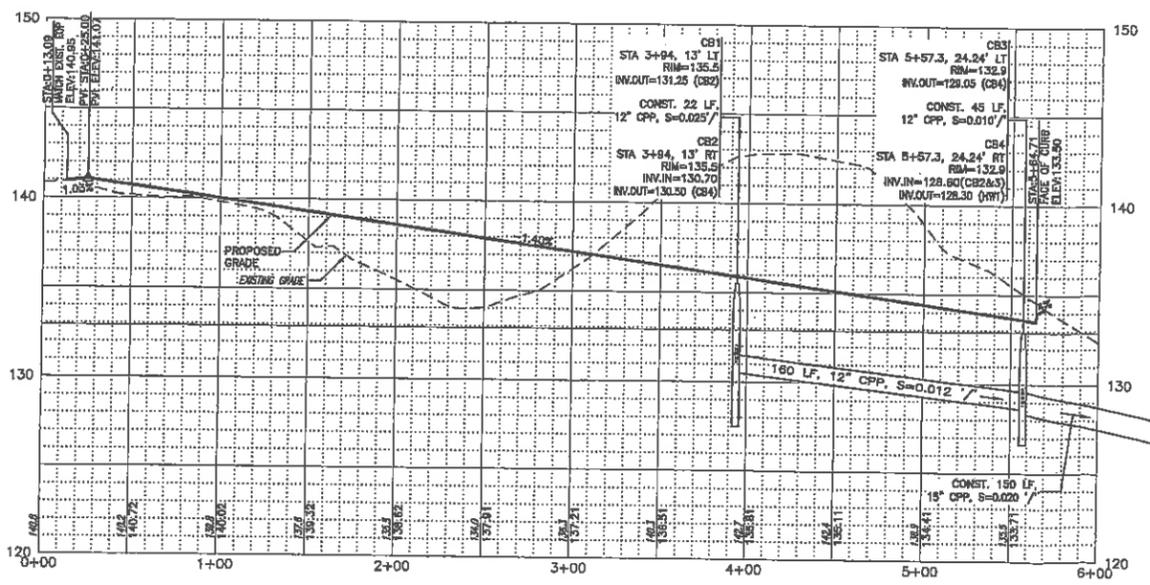
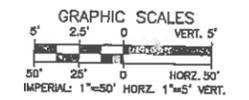
PROPOSED FEATURES

- 140 10 FT. CONTOUR
- 136 2 FT. CONTOUR
- 140.5 SPOT ELEVATION
- 140.5 SPOT ELEVATION AT CURB
- S.W.D. STORM WATER DRAINAGE
- EDGE OF PAVEMENT
- S.G.C. SLOPED GRANITE CURB
- SURFACE WATER FLOW
- T.B.R. TO BE REMOVED
- EDGE OF PAVEMENT
- SLOPED GRANITE CURB
- SWALE
- SIDEWALK
- PAVED AREA
- LIMITS OF CLEARING
- EARTHEN BERM
- R1-1 STOP SIGN & STREET ID SIGN

ABBREVIATIONS:

G.S. GARAGE SLAB
 K.W. KNEE WALL
 W.O. WALK OUT BASEMENT

CONTACT DIG SAFE
 72 HOURS PRIOR
 TO CONSTRUCTION
DIGSAFE.COM
 OR DIAL 8 1 1
 CALL 811 - KNOW WHAT'S BELOW



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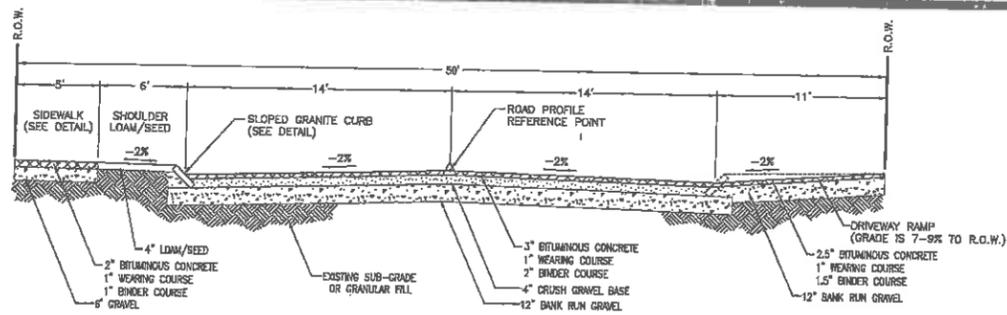
LEANORA LANE ROADWAY PLAN & PROFILE
MEADOW VIEW ESTATES
 TAX MAP D LOT 265
 (32 GROTON ROAD)
 NASHUA, NEW HAMPSHIRE
 PREPARED FOR AND LAND OF:
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SCALE: 1" = 50' JUNE 30, 2020

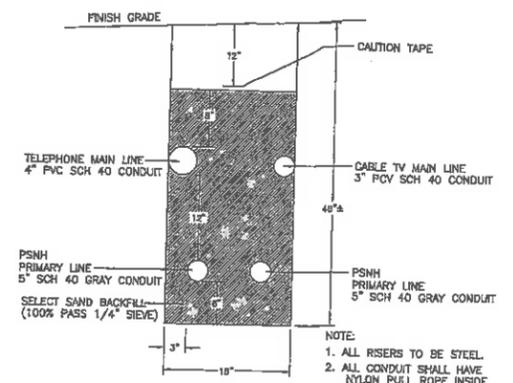
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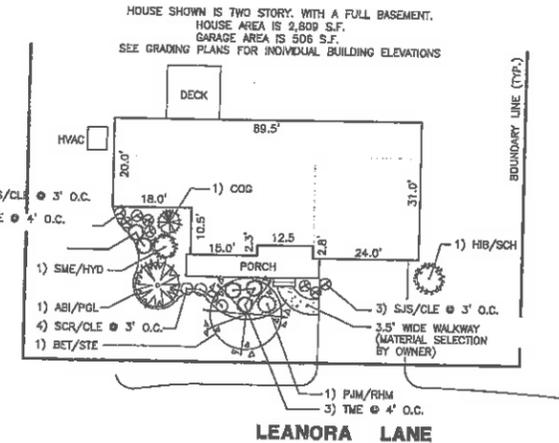
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TYPICAL CROSS-SECTION - SUBDIVISION STREET
SCALE: N.T.S.
1 DT-1



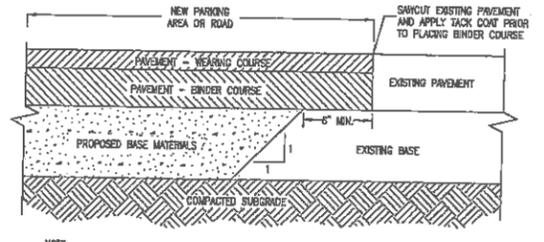
TYPICAL UTILITY TRENCH
SCALE: N.T.S.
5 DT-1



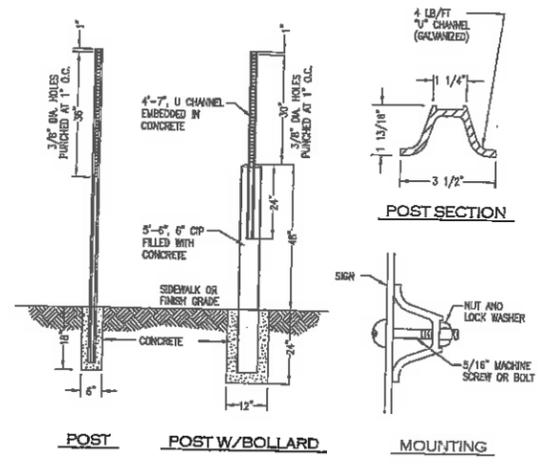
RESIDENTIAL STRUCTURE & LOT LANDSCAPING (TYPICAL)
SCALE: N.T.S.
9 DT-1

- PLANT LEGEND**
- ABI ABIES CONCOLOR (WHITE FIR)
 - BET BETULA NIGRA (HERITAGE RIVER BIRCH MULTI-STEM)
 - CLE CLETHRA COMPACTA (COMPACT SUMMERSWEET)
 - COG CHAMAECYPARIS OBUSA (GRACILIS HANOKI FALSESPYRUS)
 - HYD HYDRANGEA PANICULATA (COMPACT P.P., LIMELIGHT HYDRANGEA)
 - HIB HIBISCUS SYRIACUS (ROSE OF SHARON)
 - PGL PICEA GLAUCIA (WHITE SPRUCE)
 - RHM RHODODENDRON MEDIAL TALL (DUNNINGHAM, BOULE DE NEIGE, BOURSULT)
 - SCH SYRINGA CHAVENSIS (CHINESE LILAC)
 - SCR SPIRAEA X. B. (CRISP LEAF SPIREA)
 - SJS SPIREA JAPONICA (SHEDDI SPIREA)
 - SME SYRINGA PATULA (MISSISSIPPI LILAC)
 - STE STEWARTIA PSEUDOCAMELLIA (JAPANESE STEWARTIA)
 - TCC TAXUS CUSPIDATA (GREENWAY YEW)
 - TME TAXUS MEDIA (EVER-LOW YEW)

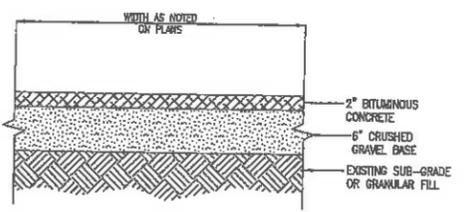
- NOTES**
- THERE SHALL BE ONE SHADE TREE PER 40 LINEAR FOOT OF ROAD FRONTAGE.
 - ALL SHRUBS ARE TO BE 24" HIGH WHEN PLANTED. ALL TREES ARE TO BE 2 TO 2-1/2 INCHES CAL. WHEN PLANTED.
 - ALL NORTH & EAST ORIENTED UNITS SHALL BE PLANTED WITH THESE NOTED SHADE/SEMI-SHADE PLANT SELECTIONS.
 - THE OWNER RESERVES THE RIGHT TO CHANGE THE HOUSE STYLE TO MEET MARKET DEMANDS WHICH MAY INCLUDE A TWO STORY OPTION, PROVIDED CITY AND STATE REGULATIONS ARE MET.



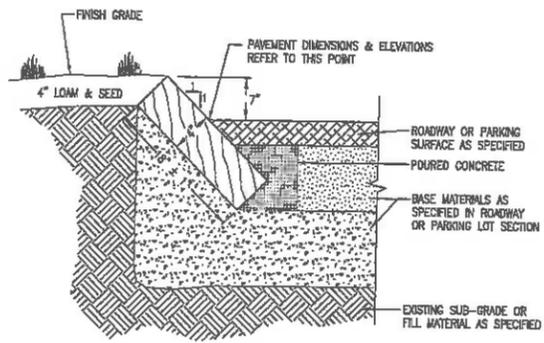
PAVEMENT MATCH
SCALE: N.T.S.
2 DT-1



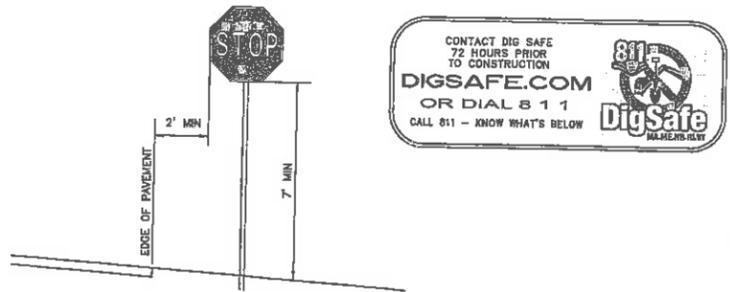
SIGN POST - STANDARD & W/BOLLARD
SCALE: N.T.S.
6 DT-1



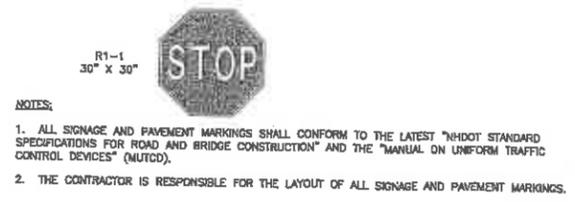
SIDEWALK - ASPHALT
SCALE: N.T.S.
3 DT-1



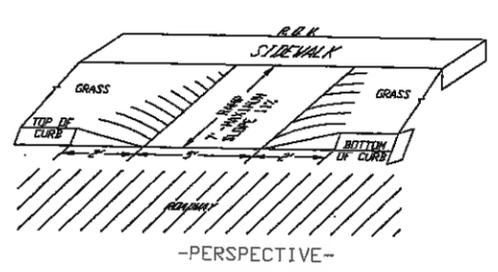
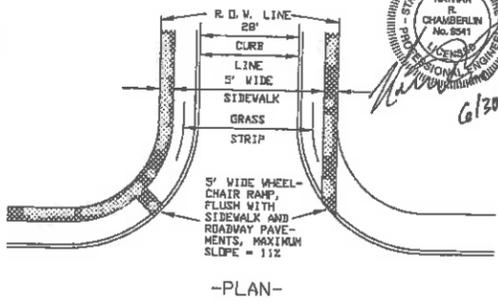
CURB - SLOPED GRANITE
SCALE: N.T.S.
4 DT-1



STOP SIGN LOCATION DETAIL
7 DT-1



TRAFFIC SIGNS - ON SITE
B DT-1



WHEELCHAIR RAMP DETAIL
SCALE: N.T.S.
11 DT-1

- INSTALL STONE CHECK DAMS AND SILTATION CONTROL FENCES IN LOCATIONS SHOWN ON PLANS. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATION.
- INSTALL STABILIZED CONSTRUCTION ENTRANCES(S).
- CUT AND CLEAR TREES; DISPOSE OF DEBRIS. STUMPS ARE TO BE DISPOSED OF APPROPRIATELY. IF THEY ARE TO BE DISPOSED OF ON-SITE THEY SHALL BE COMPACTED AND ALL VOIDS FILLED WITH SUITABLE MATERIAL COVER WITH 4" OF LOAM AND SEED PER THE EROSION CONTROL NOTES.
- REMOVE TOPSOIL AND STOCKPILE AWAY FROM ANY WETLAND. STABILIZE STOCKPILE IMMEDIATELY BY SEEDING. PLACE SALT FENCE AROUND THE DOWN SLOPE SIDE OF EARTH STOCKPILES.
- ROUGH GRADE SIDE - CONSTRUCT DRAINAGE BASINS AND DRAINAGE SWALES DURING INITIAL PORTION OF CONSTRUCTION. STABILIZE IMMEDIATELY PER THE CONSTRUCTION AND EROSION CONTROL DETAILS. DO NOT DIRECT STORM WATER RUNOFF TO THESE STRUCTURES UNTIL A HEALTHY VEGETATIVE COVER IS ESTABLISHED.
- CONSTRUCT ROAD AND INSTALL DRAINAGE PIPES AND STRUCTURES. ALL CUT AND FILL SLOPES SHALL BE STABILIZED UPON COMPLETION OF ROUGH GRADING PER THE EROSION CONTROL NOTES.
- PLACE STONE CHECK DAMS AROUND INLETS AROUND ALL STRUCTURES UNTIL ROAD AND PARKING AREAS ARE PAVED AND ALL NON-PAVED DISTURBED AREAS HAVE A HEALTHY VEGETATIVE COVER. SALT SACKS MAY BE UTILIZED IN PLACE OF STONE CHECK DAMS ON DITCHES/BENGS.
- INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS AND AFTER EVERY 0.5" OR GREATER RAINFALL.
- DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, GULVERTS, DITCHES, SILTATION FENCES, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED.
- FINISH GRADING TO PREPARE FOR PAVING AND LOADING. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING.
- FINISH PAVING. PERMANENT SEEDING SHALL BE PERFORMED UPON COMPLETION OF DRIVE AND PARKING AREA PAVING (SEE EROSION CONTROL NOTES).
- COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WHEN ALL DISTURBED AREAS HAVE BEEN STABILIZED.
- IN AN EFFORT TO RESTORE ADEQUATE INFILTRATION RATES OF THE BASIN PRIOR TO USE, THE BASES OF THE INFILTRATION BASINS SHALL BE DEEPLY TILLED AND THEN FOLLOWED BY A PASS WITH A LEVELING DRAG. STORMWATER FLOWS ARE NOT TO BE DIRECTED INTO THE INFILTRATION BASINS UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
- ALL STRUCTURES SHALL BE CLEANED OF SEDIMENTS ONCE CONSTRUCTION IS COMPLETE.

CONSTRUCTION SEQUENCE NOTES
10 DT-1

| REV. | DATE | DESCRIPTION | C/D | DR | CK |
|------|------|-------------|-----|----|----|
| | | | | | |

CONSTRUCTION DETAILS

MEADOW VIEW ESTATES
TAX MAP D LOT 265
(32 GROTON ROAD)
NASHUA, NEW HAMPSHIRE
PREPARED FOR AND LAND OF:
B & A CONSTRUCTION LLC
341 SILVER LAKE ROAD, HOLLIS, NH 03049

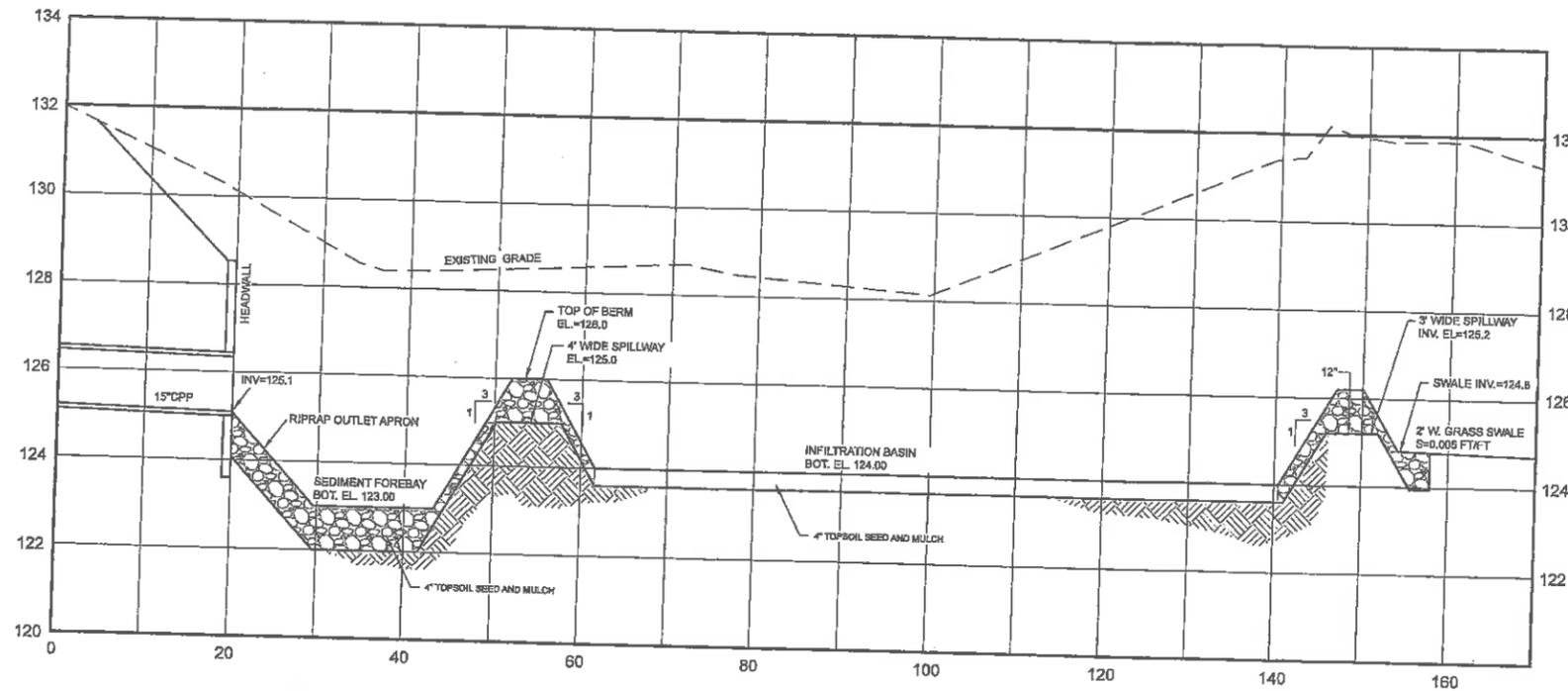
SCALE: AS NOTED JUNE 30, 2020

Surveying + Engineering + Land Planning + Permitting + Septic Designs

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SECTION A-A INFILTRATION BASIN #1

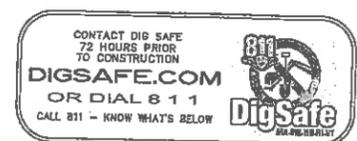
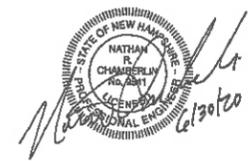
SEE SHEET GR-1 FOR PLAN VIEW OF SECTION

SCALE: 1"=10' (H) 2"=10' (V)

1
DT-2

- INFILTRATION BASIN CONSTRUCTION NOTES**
- REMOVE ALL ORGANIC MATERIAL FROM AREA BELOW PROPOSED INFILTRATION BASINS AND TO EXPOSE UNDERLYING SOILS.
 - CARE SHALL BE TAKEN TO PROTECT THE UNDERLYING SOILS FROM CONSTRUCTION TRAFFIC AND THE DISCHARGE OF SEDIMENT LADEN RUNOFF.
 - DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION SYSTEM.
 - ONCE EXCAVATED AND PRIOR TO FILLING, THE UNDERLYING SOILS SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH LEVELING DRAG.
 - THE BASIN FLOOR OF INFILTRATION BASIN IB-201 SHALL BE PREPARED USING ONE OF THE FOLLOWING METHODS:
 - 8" LAYER OF COURSE SAND OR 3/8" PEA GRAVEL;
 - GRASS TURF WITH A HIGH INFILTRATION RATE (HIGH SAND CONTENT) THAT CAN BE INUNDATED FOR OVER 72 HOURS;
 - COARSE ORGANIC MATERIAL SUCH AS AN EROSION CONTROL MIX OR COMPOSTED MULCH THAT IS TILLED INTO THE SOIL, SOAKED, AND ALLOWED TO DRY.
 - THE BASIN FLOOR OF THE INFILTRATION BASIN IB101 SHALL BE PREPARED USING ONE OF THE FOLLOWING METHODS:
 - A) A FILTER MEDIA 24" DEEP CONSISTING 50% TO 55% BY VOLUME SAND ALSO IDENTIFIED AS ASTM C-33 CONCRETE SAND, 20% TO 30% BY VOLUME OF LOAMY SAND TOPSOIL WITH 15% TO 25% FINES PASSING THE NUMBER 200 SIEVE, AND 20% TO 30% BY VOLUME MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH WITH LESS THAN 5% PASSING THE NUMBER 200 SIEVE.
 - B) A FILTER MEDIA 24" DEEP CONSISTING 20% TO 30% BY VOLUME OF MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH THAT HAS NO MORE THAN 5% FINES PASSING THE NUMBER 200 SIEVE, WITH 70 TO 80% BY VOLUME LOAMY COARSE SAND USED IN THE MIXTURE MEETING THE FOLLOWING SIEVE ANALYSIS SPECIFICATION:
 - FROM 85 TO 100 PERCENT BY WEIGHT SHALL PASS THE NUMBER 10 SIEVE;
 - FROM 70 TO 100 PERCENT BY WEIGHT SHALL PASS THE NUMBER 20 SIEVE;
 - FROM 15 TO 40 PERCENT BY WEIGHT SHALL PASS THE NUMBER 60 SIEVE; AND
 - FROM 8 TO 15 PERCENT BY WEIGHT SHALL PASS THE NUMBER 200 SIEVE;
 - C) FILTER SHALL NOT BE COVERED BY GRASS.
 - D) FILTER MEDIA SHALL BE TESTED BY THE ENGINEER PRIOR TO USE FOR THE BASIN BOTTOM TO ENSURE A MAXIMUM EXFILTRATION RATE OF 10.0 IN./HR.
 - DO NOT PLACE INFILTRATION BASINS/TRENCHES INTO SERVICE UNTIL ALL CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

SEE SHEET GR-1 FOR PLAN VIEW OF SECTION
INFILTRATION BASIN CONSTRUCTION NOTES 2
 DT-2



| REV. | DATE | DESCRIPTION | C/O | DR | CK |
|------|------|-------------|-----|----|----|
| | | | | | |

INFILTRATION BASIN DETAIL

MEADOW VIEW ESTATES
 TAX MAP D LOT 266
 (32 GROTON ROAD)
 NASHUA, NEW HAMPSHIRE
 PREPARED FOR AND LAND OF:
B & A CONSTRUCTION LLC
 341 SILVER LAKE ROAD, HOLLIS, NH 03049

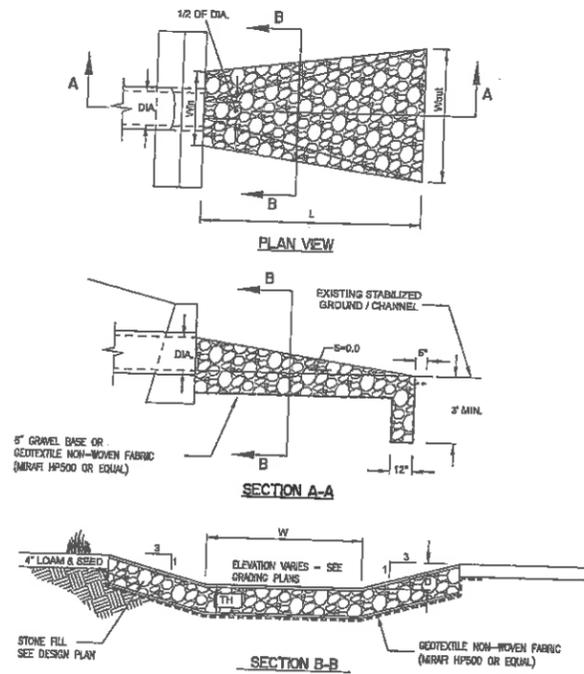
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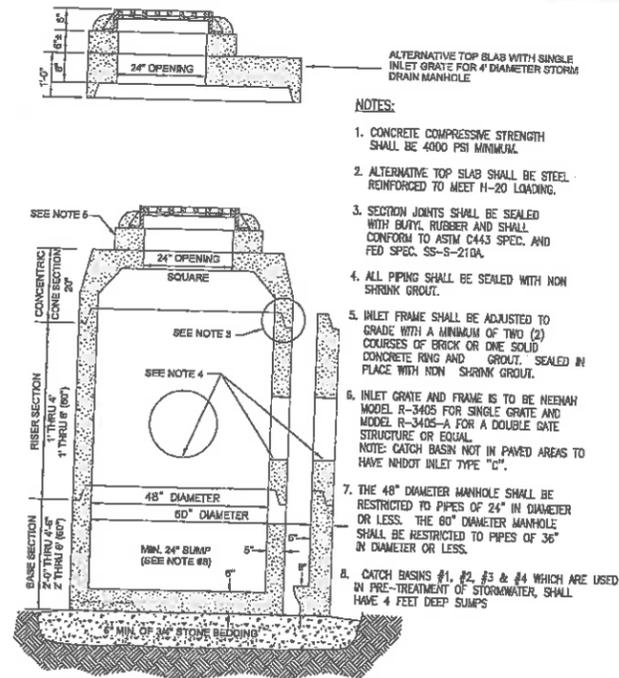
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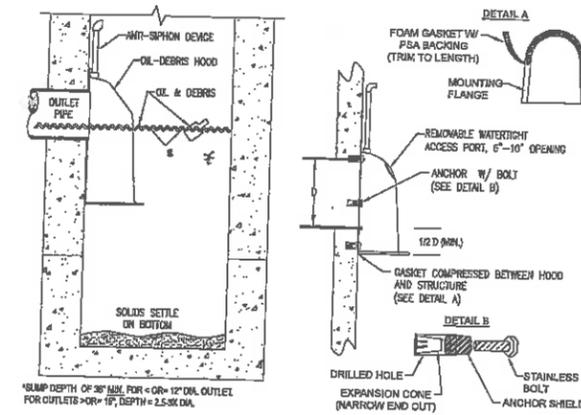
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RIP-RAP OUTLET PROTECTION 1 DT-3



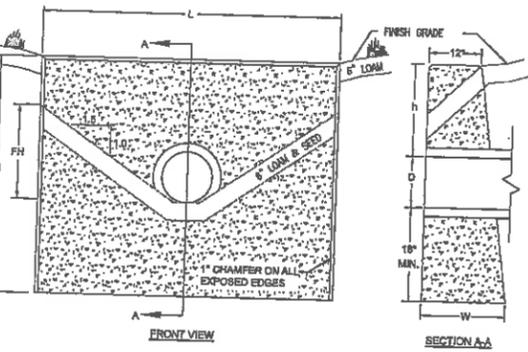
CATCH BASIN 3 DT-3 SCALE: N.T.S.



| STRUCTURE OUTLET HOLE SIZE | HOOD SIZE |
|----------------------------|-----------|
| 11.9\"/> | |

- NOTES:**
- ALL HOODS SHALL BE EQUIPPED WITH A WATER-TIGHT ACCESS PORT, A MOUNTING FLANGE, AND AN ANTI-SIPHON VENT AS DRAWN. (SEE CONFIGURATION DETAIL)
 - THE SIZE AND POSITION OF THE HOOD SHALL BE DETERMINED BY OUTLET PIPE SIZE AS PER MANUFACTURER'S RECOMMENDATION.
 - THE BOTTOM OF THE HOOD SHALL EXTEND DOWNWARD A DISTANCE EQUAL TO 1/2 THE OUTLET PIPE DIAMETER WITH A MINIMUM DISTANCE OF 6\"/>

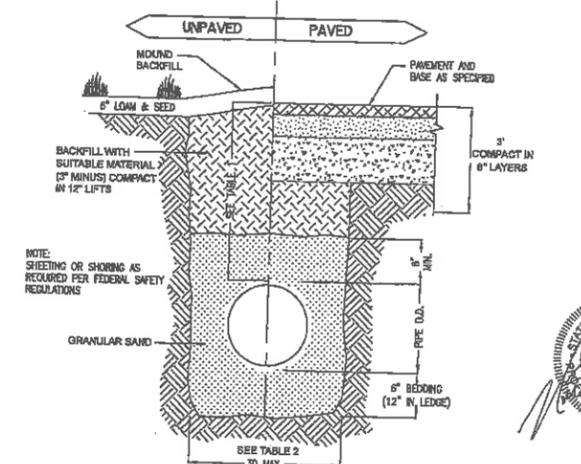
OIL-DEBRIS HOOD 4 DT-3 SCALE: N.T.S. (TO BE INSTALLED ON CB-4)



| DULVERT DIA. (D) | HEADWALL LENGTH (L) | HEADWALL HEIGHT (H) | FILL HEIGHT (FH) | PIPE COVER | | HEADWALL BOTTOM WIDTH (W) |
|------------------|---------------------|---------------------|------------------|------------|-------|---------------------------|
| | | | | I | II | |
| 12 | 4'-2" | 3'-8" | 1'-3" | 1'-5" | 1'-5" | 1'-11" |
| 18 | 5'-11" | 4'-2" | 1'-7" | 1'-5" | 1'-5" | 2'-0" |
| 18 | 6'-11" | 4'-8" | 1'-10" | 1'-8" | 1'-8" | 2'-1" |
| 24 | 8'-10" | 4'-11" | 2'-0" | 1'-5" | 1'-5" | 2'-3" |

HEADWALL - PRECAST CONCRETE 2 DT-3 SCALE: N.T.S.

CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION
DIGSAFE.COM
 OR DIAL 8 1 1
 CALL 811 - KNOW WHAT'S BELOW



| LOCATION | PIPE MATERIAL | MINIMUM COVER |
|---------------|---------------|---------------|
| PAVED ROADS | ALL | 3 FT. |
| UNPAVED ROADS | ALL | 2 FT. |
| DRIVEWAYS | ALL | 1 FT. |
| UNPAVED AREAS | ALL | 2 FT. |

| INSIDE DIAMETER | TOTAL WIDTH |
|-----------------|-------------|
| 12" TO 24" | I.D. + 24" |
| OVER 24" | 2 x I.D. |

DRAINAGE TRENCH (TYPICAL) 5 DT-3 SCALE: N.T.S.

- ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REQUIREMENTS AND SPECIFICATIONS OF THE CITY OF NASHUA.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS AND SHALL VERIFY THAT ALL THE INFORMATION SHOWN HEREON IS CONSISTENT, COMPLETE, ACCURATE, AND CAN BE CONSTRUCTED PRIOR TO AND/OR DURING CONSTRUCTION. FIELDSTONE LAND CONSULTANTS, PLLC, AS THE DESIGN ENGINEER, SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES, ERRORS, OMISSIONS, OR EXISTING UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION SO THAT REMEDIAL ACTION MAY BE TAKEN BEFORE PROCEEDING WITH THE WORK.
- THE CONTRACTOR SHALL CONTACT "DIGSAFE" 72 HOURS PRIOR TO THE START OF CONSTRUCTION (811).
- COMPLIANCE WITH ALL APPLICABLE REGULATIONS AND SPECIAL CONDITIONS OF TOWN/CITY AGENCIES, SUCH AS THE PLANNING BOARD, ZONING BOARD, CONSERVATION COMMISSION, AND OTHERS, IS MANDATORY AND IS THE RESPONSIBILITY OF THE OWNER.
- ANY ALTERATION OF THIS DESIGN OR CHANGE DURING CONSTRUCTION MAY REQUIRE APPROVAL OF VARIOUS TOWN/CITY BOARDS OR AGENCIES AND SHALL BE DISCUSSED WITH THE OWNER AND FIELDSTONE LAND CONSULTANTS, PLLC PRIOR TO CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE CITY DEPARTMENTS PRIOR TO CONSTRUCTION TO ARRANGE FOR NECESSARY INSPECTIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCURATE AS-BUILT INFORMATION OF ALL WORK, ESPECIALLY UNDERGROUND CONSTRUCTION OF UTILITY LINES, SERVICES, CONNECTIONS, ETC. AND APPROPRIATE TIES TO ABOVE GROUND PERMANENT STRUCTURES, FIELD SURVEY COORDINATES, OR SOME OTHER METHOD OF ESTABLISHING THE AS-BUILT CONDITION OF ALL CONSTRUCTION.
- THE CONTRACTOR AND OWNER ARE RESPONSIBLE FOR OBSERVING AND MARKING THE PROJECT PER RSA 430:53 AND AGR 3800 REGARDING INVASIVE SPECIES (PLANTS AND INSECTS). NO INVASIVE SPECIES PLANT OR INSECT SHALL BE INTRODUCED ONTO THE SITE.

GENERAL CONSTRUCTION NOTES 6 DT-3

- CATCH BASINS, PIPE INLETS, DRAINAGE BASINS AND SPILLWAYS SHALL BE INSPECTED AFTER EVERY MAJOR STORM FOR POLLUTANT BUILD-UP. POLLUTANTS CONSIST OF SEDIMENTS, DEBRIS AND/OR FLOATING HYDROCARBONS.
- IN THE ABSENCE OF A MAJOR STORM, THE SYSTEM MUST BE CHECKED AT LEAST TWICE A YEAR, IN THE SPRING AND FALL FOR HYDROCARBON ACCUMULATION.
- IF, UPON INSPECTION, A SIGNIFICANT AMOUNT OF POLLUTANTS HAVE ACCUMULATED IN ANY OF THE CATCH BASINS, THEN THE POLLUTANTS MUST BE REMOVED AND DISPOSED OF PROPERLY.
- A SIGNIFICANT AMOUNT OF POLLUTANTS SHALL BE DEFINED AS A NOTICEABLE SHEEN ON THE WATER SURFACE IN THE SUMPS OF ANY CATCH BASINS AND/OR WHEN SEDIMENTS HAVE ACCUMULATED TO WITHIN 6 INCHES BELOW THE OUTLET OF ANY OF THE CATCH BASINS. WHEN EITHER OF THESE SITUATIONS ARE DISCOVERED UPON THE REQUIRED SEMIANNUAL INSPECTION, THEN THE STEPS STATED ABOVE SHALL BE COMPLETED.
- THE DRAINAGE BASIN EMBANKMENTS SHOULD BE INSPECTED FOR RODENT BURROWS, BARE SPOTS, WET AREAS OR EROSION. ANY DEFICIENCIES SHALL BE CORRECTED TO PREVENT ADDITIONAL DAMAGE.
- PIPE OUTLETS SHOULD BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. THE CONDITION OF THE PIPES SHOULD BE NOTED AND REPAIRS MADE AS NECESSARY. IF EROSION IS TAKING PLACE THEN MEASURES SHOULD BE TAKEN TO STABILIZE AND PROTECT THE ERODED AREA OF THE OUTLET.

STORMWATER MAINTENANCE NOTES 7 DT-3

DRAINAGE DETAILS
MEADOW VIEW ESTATES
 TAX MAP D LOT 265
 (32 GROTON ROAD)
 NASHUA, NEW HAMPSHIRE
 PREPARED FOR AND LAND OF:
B & A CONSTRUCTION LLC
 341 SILVER LAKE ROAD, HOLLIS, NH 03049

SCALE: AS NOTED JUNE 30, 2020

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EROSION CONTROL (GENERAL CONSTRUCTION)

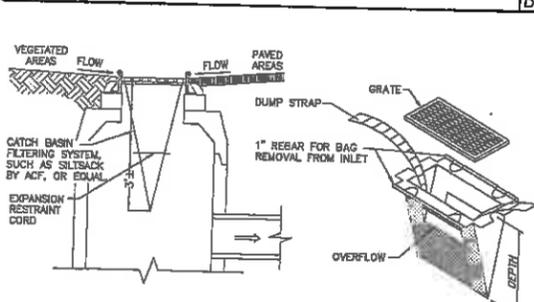
- PRIOR TO STARTING ANY WORK ON THE SITE THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES.
- EROSION CONTROL MEASURES SHALL BE INSTALLED PER PLANS AND DETAILS. PERIMETER CONTROLS SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF EARTH DISTURBANCE ACTIVITIES.
- EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEN POSSIBLE.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE KEPT CLEAN DURING CONSTRUCTION. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEK AND AFTER EVERY 500' OF GREATER DISTANCE. SEDIMENT SHALL BE REMOVED OF IN AN UPWARD AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT OFF-SITE AND BE PERMANENTLY STABILIZED.
- THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION. AT NO TIME SHALL THE TOTAL UNSTABILIZED DISTURBED AREA, INCLUDING LOW DISTURBANCES, BE GREATER THAN FIVE (5) ACRES.
- THE LAND AREA EXPOSED SHALL BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME. ALL NON-ACTIVE DISTURBED AREAS SHALL BE STABILIZED WITHIN 30 DAYS OF THE COMPLETION. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF FINAL GRADING.
- DITCHES, SWALES AND DRAINAGE BASINS SHALL BE CONSTRUCTED DURING THE INITIAL PHASE OF CONSTRUCTION AND STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- AN AREA SHALL BE CONSIDERED STABILIZED IF ONE OF THE FOLLOWING HAS OCCURRED:
 - BASE COURSE GRASS HAS BEEN INSTALLED IN AREAS TO BE PAVED.
 - A MINIMUM OF 3-INCHES OF NON-EROSIVE MATERIAL, SUCH AS STONE OR RIPRAP, HAS BEEN INSTALLED.
 - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- EROSION CONTROL BLANKETS SHALL BE INSTALLED ON ALL SLOPES THAT ARE STEEPER THAN 2:1 (HORIZONTAL / VERTICAL). UNLESS OTHERWISE SPECIFIED THE CONTRACTOR SHALL USE NORTH AMERICAN GREEN SCISSO, OR APPROVED EQUIV.
- ALL AREAS REQUIRING EROSION CONTROL STONE OR RIPRAP SHALL HAVE A GEOTEXTILE MATERIAL INSTALLED BELOW THE STONE (SEE APPROPRIATE DETAILS).
- ALL DISTURBED AREAS TO BE FINISHED SHALL BE COVERED WITH A MINIMUM THICKNESS OF 6 INCHES OF COMPACTED LOAM. LOAM SHALL BE COVERED WITH THE APPROPRIATE SEED MIXTURE AS INDICATED BELOW.

| PERMANENT SEED (LAWN AREAS) LBS. / 1,000 SQ. FT. | PERMANENT SLOPE SEED MIX LBS. / 1,000 SQ. FT. |
|---|--|
| ORCHARD RED FESCUE 0.02 LBS | ORCHARD RED FESCUE 0.02 LBS |
| FESTUCA TENACISS 1.10 LBS | PERENNIAL RYEGRASS 0.08 LBS |
| REHLMANN BLUESGRASS 0.08 LBS | RYEGRASS 0.08 LBS |
| RENTON 0.12 LBS | ALISC CLOVER 0.12 LBS |
| | BROODFOOT TREFOF 0.12 LBS |
| | |
| **APPLICATION RATE TOTALS 2.8 LBS PER 1,000 SQ. FT. | **APPLICATION RATE TOTALS 0.40 LBS PER 1,000 SQ. FT. |
- APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. IF SOIL TESTING IS NOT FEASIBLE (CRITICAL TIME FRAMES OR VARIABLE SITES) THEN APPLY FERTILIZER AT A RATE OF 11 POUNDS PER 1,000 SQ. FT. AND LIMESTONE AT A RATE OF 90 POUNDS PER 1,000 SQ. FT. FERTILIZER SHALL BE LOW PHOSPHATE (LESS THAN 2% PHOSPHORUS).
- CAUTION SHOULD BE TAKEN WHEN THE PROPERTY IS LOCATED WITHIN 250 FEET OF A WATER BODY. IN THIS CASE ALL FERTILIZERS SHALL BE RESTRICTED TO A LOW PHOSPHATE SLOW RELEASE NITROGEN FERTILIZER. SLOW RELEASE FERTILIZERS MUST BE AT LEAST 50% SLOW RELEASE NITROGEN COMPONENT. NO FERTILIZER EXCEPT LIMESTONE SHALL BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER. THESE ARE REGULATED LIMITATIONS.
- PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS (SEE WINTER CONSTRUCTION NOTES). NO DISTURBED AREAS SHALL BE LEFT EXPOSED DURING THE WINTER MONTHS.
- A MUDGARD DUST CONTROL PROGRAM SHALL BE APPLIED BY THE SITE CONTRACTOR. DUST SHALL BE MANAGED THROUGH THE USE OF WATER AND/OR CALCIUM CHLORIDE.
- IN NO WAY ARE THE MEASURES INDICATED ON THE PLANS OR IN THESE NOTES TO BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL USE JUDGEMENT TO INSTALL ADDITIONAL EROSION CONTROL MEASURES AS SITE CONDITIONS, WEATHER OR CONSTRUCTION METHODS WARRANT.
- FOLLOWING PERMANENT STABILIZATION, TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AND ACCUMULATED SEDIMENTATION IS TO BE DISPOSED OF IN AN APPROVED LOCATION, OUTSIDE OF JURISDICTIONAL WETLANDS.
- IN AN EFFORT TO RESTORE MEDIANE INFILTRATION RATES OF THE BASINS PRIOR TO USE, THE BASES OF THE INFILTRATION BASINS SHALL BE DEEPLY TILLED AND THEN FOLLOWED BY A PASS WITH A LEVELING DRAG. STURDIER FLOWS ARE NOT TO BE OBTAINED WITH THE INFILTRATION BASINS UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
- LOT DISTURBANCE OTHER THAN SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.
- THE CONTRACTOR AND OWNER ARE RESPONSIBLE FOR OBSERVING AND MANAGING THE PROJECT PER RSA 663:5 AND AER 3800 REGARDING INVASIVE SPECIES (PLANTS AND INSECTS). NO INVASIVE SPECIES PLANT OR INSECT SHALL BE INTRODUCED ONTO THE SITE.

EROSION CONTROL (WATER CONSTRUCTION)

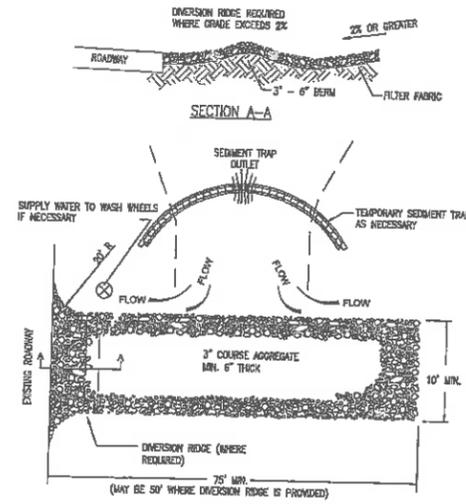
- ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF BEST VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED. STABILIZATION METHODS SHALL INCLUDE SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 2:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH FOR ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF BEST VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL OR PROPERLY INSTALLED EROSION CONTROL BLANKETS COVERED WITH MULCH. OTHER STABILIZATION OPTIONS ARE TO BE APPROVED BY THE APPROPRIATE AGENCIES AND THE DESIGN ENGINEER. IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER MONTHS THEN THE ROAD SHOULD BE CLEARED OF ACCUMULATED SNOW AFTER EACH STORM EVENT.

EROSION CONTROL NOTES



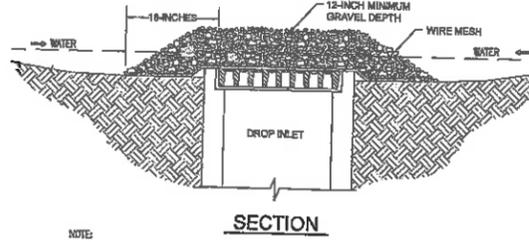
- NOTES:
- INSTALL AND MAINTAIN SACKS IN ALL CATCH BASINS.
 - TO INSTALL SACK, REMOVE CATCH BASIN GRATE AND PLACE SACK IN OPENING. HOLD OFF APPROXIMATELY SIX INCHES OF THE SACK OUTSIDE THE FRAME FOR THE LIFTING STRAPS. REPLACE THE GRATE TO HOLD THE SACK IN PLACE.
 - THE SACK SHOULD BE INSPECTED AFTER EVERY STORM, OR ONCE EVERY TWO WEEKS, WHICH EVER OCCURS FIRST.
 - THE RESTRAINT CORD SHOULD BE VISIBLE AT ALL TIMES. IF THE CORD IS COVERED WITH SEDIMENT, THE SACK SHOULD BE EMPTIED, EMPTED THE SACK AWAY FROM THE CATCH BASIN TO PREVENT SEDIMENT FROM RE-ENTERING THE CATCH BASIN. EMPTED THE SACK PER THE MANUFACTURERS RECOMMENDATIONS.
 - REPLACE THE SACK IN THE CATCH BASIN AFTER THE SACK HAS BEEN EMPTIED. ONCE CONSTRUCTION IS COMPLETE AND ALL DISTURBED AREAS HAVE BEEN STABILIZED BY PAVING OR A HEALTHY VEGETATIVE COVER, REMOVE THE SACK FROM THE CATCH BASIN.

SILTY SACK SEDIMENT FILTER SCALE: N.T.S. DT-4



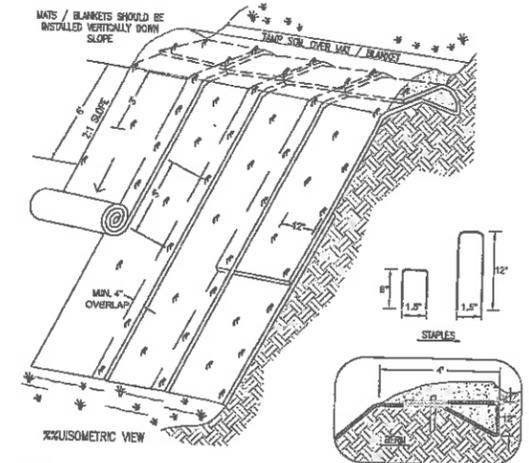
- NOTES:
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOPING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 - THE MINIMUM STONE USED SHOULD BE 3-INCH CRUSHED STONE.
 - THE MINIMUM LENGTH OF THE PAD SHOULD BE 75 FEET, EXCEPT THAT THE MINIMUM LENGTH MAY BE REDUCED TO 50 FEET IF A 3-INCH TO 6-INCH HIGH BERM IS INSTALLED AT THE ENTRANCE OF THE PRODUCT SITE.
 - THE PAD SHOULD EXTEND THE FULL WIDTH OF THE CONSTRUCTION ACCESS ROAD OR TO FLOW, WHICHEVER IS GREATER.
 - THE PAD SHOULD SLOPE AWAY FROM THE EXISTING ROADWAY.
 - THE PAD SHOULD BE AT LEAST 6-INCHES THICK.
 - THE GEOTEXTILE FILTER FABRIC SHOULD BE PLACED BETWEEN THE STONE PAD AND THE EARTH SURFACE BELOW THE PAD.
 - THE PAD SHALL BE MAINTAINED OR REPLACED WHEN MUD AND SOIL PARTICLES CLOG THE Voids IN THE STONE SUCH THAT MUD AND SOIL PARTICLES ARE TRACKED OFF-SITE.
 - NATURAL DRAINAGE THAT CROSSES THE LOCATION OF THE STONE PAD SHOULD BE INTERCEPTED AND PIPED BENEATH THE PAD, AS NECESSARY, WITH SUITABLE OUTLET PROTECTION.
 - WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
 - WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

GRAVEL CONSTRUCTION EXIT SCALE: N.T.S. DT-4



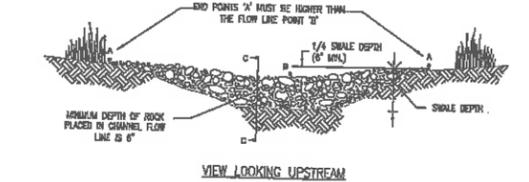
- NOTE:
- DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS (LESS THAN 5%).
 - THIS TYPE OF BARRIER HAS NO OVERFLOW PROVISION. WILL RESULT IN PONDING IF THE SEDIMENT IS NOT REMOVED REGULARLY AND SHOULD THEREFORE NOT BE USED WHEN OVERFLOW MAY ENHANCE DOWN SLOPE AREAS.
 - THE WIRE MESH SHOULD BE PLACED OVER THE DROP INLET SO THAT THE ENTIRE OPENING AND A MINIMUM OF 12-INCHES AROUND THE OPENING ARE COVERED BY THE MESH.
 - THE WIRE MESH SHOULD BE HARDWARE CLOTH OR WIRE WITH OPENINGS UP TO ONE HALF INCH.
 - THE GRAVEL FILTER SHOULD BE CLEAN COARSE AGGREGATE.
 - THE GRAVEL SHOULD EXTEND AT LEAST 18-INCHES ON ALL SIDES OF THE DRAIN OPENING AND SHALL BE AT LEAST 12-INCHES IN DEPTH.
 - IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE STRUCTURE, CLEANED AND REPLACED.

GRAVEL & WIRE MESH SEDIMENT BARRIER SCALE: N.T.S. DT-4



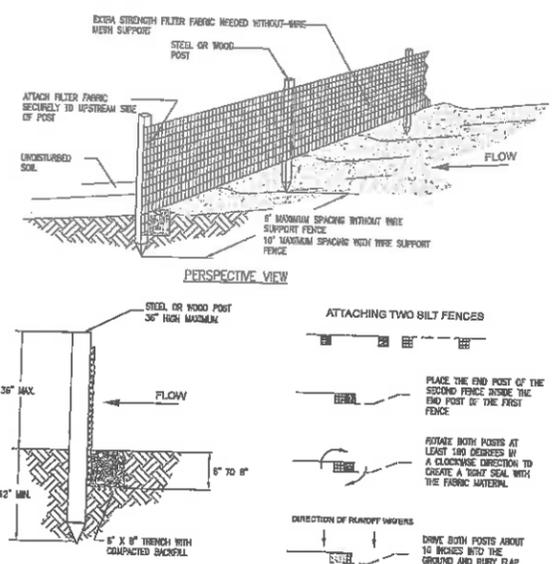
- NOTES:
- DIMENSIONS GIVEN IN THIS DETAIL ARE EXAMPLES. DEVICE SHOULD BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
 - INSTALL STRIP/COCOAUT FIBER EROSION CONTROL MAT SUCH AS NORTH AMERICAN GREEN SCISSO OR EQUIV. ON ALL SLOPES EXCEEDING 3' HORIZ : 1' VERT.
 - THE EROSION CONTROL MATERIAL(S) SHALL BE ANCHORED WITH "U" SHAPED #11 GAUGE WIRE STAPLES OR WOODEN STAKES WITH A MINIMUM TOP WIDTH OF 1 INCH AND LENGTH OF 6 INCH.
 - SLOPE SURFACE SHALL BE FREE OF ROCKS, CLOGS, STICKS AND GRASS. MATS / BLANKETS SHALL HAVE GOOD SOIL CONTACT.
 - APPLY LIME, FERTILIZER AND PERMANENT SEEDING BEFORE PLACING BLANKETS.
 - BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET AS SHOWN. ROLL THE BLANKETS DOWN THE SLOPE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES OR STAKES IN APPROPRIATE LOCATIONS. REFER TO MANUFACTURERS STAPLE GUIDE FOR CORRECT STAPLE PATTERN.
 - LAY BLANKETS LOOSELY AND STAKE OR STAPLE TO MAINTAIN DIRECT CONTACT WITH THE SOIL. DO NOT STRETCH.
 - IN LOOSE SOIL CONDITIONS THE USE OF STAPLES OR STAKE LENGTHS GREATER THAN 8 INCHES MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
 - THE CONTRACTOR SHALL MAINTAIN THE BLANKET UNTIL ALL WORK ON THE CONTRACT HAS BEEN COMPLETED AND ACCEPTED. MAINTENANCE SHALL CONSIST OF THE REPAIR OF AREAS DAMAGED BY ANY CAUSE. ALL DAMAGED AREAS SHALL BE REPAIRED TO REESTABLISH THE CONDITIONS AND GRADE OF THE SOIL PRIOR TO APPLICATION OF THE COVERING AND SHALL BE RESEEDING, RESEEDING AND REWEEDING AS DIRECTED.

EROSION BLANKETS - SLOPE INSTALLATION SCALE: N.T.S. DT-4



- NOTES:
- STONE CHECK DAMS SHOULD BE INSTALLED BEFORE RUNOFF IS DIRECTED TO THE SWALE OR DRAINAGE DITCH.
 - THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE CHECK DAM SHOULD BE LESS THAN ONE ACRE.
 - STONE CHECK DAMS SHOULD NOT BE USED IN A FLOWING STREAM.
 - STONE CHECK DAMS SHOULD BE CONSTRUCTED OF WELL-GRADED ANGULAR 2 TO 3 INCH STONE. THE INSTALLATION OF 3/4-INCH STONE ON THE UPGRADIENT FACE IS RECOMMENDED FOR BETTER FILTERING.
 - WHEN INSTALLING STONE CHECK DAMS THE CONTRACTOR SHALL KEY THE STONE INTO THE CHANNEL BANKS AND EXTEND THE STONE BEYOND THE ABUTMENTS A MINIMUM OF 18-INCHES TO PREVENT FLOW AROUND THE DAM.
 - STONE CHECK DAMS SHOULD BE REMOVED ONCE THE SWALE OR DITCH HAS BEEN STABILIZED UNLESS OTHERWISE SPECIFIED.

STONE CHECK DAM SCALE: N.T.S. DT-4



- NOTES:
- SILT FENCES SHOULD NOT BE USED ACROSS STREAMS, CHANNELS, SWALES, GULLIES OR OTHER DRAINAGE WAYS.
 - SILT FENCE SHOULD BE INSTALLED FOLLOWING THE CONTOUR OF THE LAND AS CLOSELY AS POSSIBLE AND THE ENDS OF THE SILT FENCE SHOULD BE FLARED UP-SLOPE.
 - IF THE SITE CONDITIONS INCLUDE FROZEN GROUND, LEDGE OR THE PRESENCE OF HEAVY ROOTS THE BASE OF THE FABRIC SHOULD BE EMBEDDED WITH A MINIMUM THICKNESS OF 6 INCHES OF 3/4-INCH STONE.
 - SILT FENCES PLACED AT THE TOE OF SLOPES SHOULD BE INSTALLED AT LEAST 6 FEET FROM THE TOE TO ALLOW SPACE FOR SHALLOW PONDING AND ACCESS FOR MAINTENANCE.
 - THE MAXIMUM SLOPE ABOVE THE FENCE SHOULD BE 2:1 AND THE MAXIMUM LENGTH OF SLOPE ABOVE THE FENCE SHOULD BE 100 FEET.
 - REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
 - SILT FENCES SHOULD BE REMOVED WHEN THE UP-SLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.

SILT FENCE SCALE: N.T.S. DT-4

CONTACT DIG SAFE 72 HOURS PRIOR TO CONSTRUCTION
DIGSAFE.COM
 OR DIAL 8 1 1
 CALL 811 - KNOW WHAT'S BELOW

EROSION CONTROL DETAILS
MEADOW VIEW ESTATES
 TAX MAP D LOT 265
 (32 GROTON ROAD)
 NASHUA, NEW HAMPSHIRE
 PREPARED FOR AND LAND OF:
B & A CONSTRUCTION LLC
 341 SILVER LAKE ROAD, HOLLIS, NH 03049

SCALE: AS NOTED JUNE 30, 2020
 Surveying + Engineering + Land Planning + Permitting + Septic Designs

FIELDSTONE
 LAND CONSULTANTS, PLLC

208 Elm Street, Milford, NH 03055
 Phone: (603) 672-5458 Fax: (603) 413-5456
 www.FieldstoneLandConsultants.com

FILE: 2322D700.dwg PROJ. NO. 2322.00 SHEET: DT-4 PAGE NO. 10 OF 10

NASHUA CITY PLANNING BOARD
STAFF REPORT

TO: Nashua City Planning Board
FROM: Linda McGhee, Deputy Planning Manager
FOR: September 24, 2020
RE: **New Business #4 - Site Plan**

I. Project Statistics:

Owner: Alla Maak Properties, LLC
Applicant: TMC CF of New England, LLC
Proposal: Amendment to NR 0946 to demolish existing building and construct a convenience store with a gas station
Location: 452 Amherst Street
Total Site Area: 1.156 acres (50,345 sf)
Existing Zoning: PI-Park Industrial/MU-Mixed Use
Surrounding Uses: Commercial

II. Background Information:

The building at 452 Amherst Street, known as the Country Tavern, has stood on its site for over two hundred years; recently they announced its permanent closure. Once part of a small farm with 40+ acres, it was renovated for use as a restaurant in the early 1980s. The Zoning Board of Adjustment granted a Use Variance in 1981 to convert the existing house and barn to a restaurant use with a Special Exception to increase parking. In 1982, an easement was placed on the property to preserve the appearance of the façade as it then existed in perpetuity.

On September 12, 2019 the applicant received a favorable recommendation from this board to release the façade easement and on October 8, 2019 the Board of Alderman approved the release of the façade easement.

In 2018 the Board of Alderman rezoned a portion of Amherst Street from Airport Industrial to Park Industrial/Mixed Use to allow for greater flexibility and reflect what is going on these lots.

On June 9, 2020 the ZBA approved a Use Variance to allow a convenience store/gas station where 75% of the building gross floor area is otherwise required to be reserved for used in the “industrial and manufacturing” category to allow this project to move forward.

III. Project Description:

As part of the proposed project, the applicant proposes to redevelop the property as follows:

- Construction of a new 4,996 sf colonial style retail convenience store,

- Installation of a single row of fuel dispensers. The dispensers will be aligned to be parallel with Amherst Street to enhance on-site circulation,
- Construction of a new overhead canopy with state-of-the-art fire suppression system above the gas dispensers,
- Replacement of existing signs,
- Construction of a total of 25 parking spaces,
- Installation of new double-wall fiberglass underground tanks, and
- Upgrade and enhancement of landscaping throughout the property.

A Traffic Impact Report and Stormwater Management Report have been submitted and the executive summaries are attached as well as a site plan suitability report as this property is located in the Mixed Use Overlay.

Two waivers are being requested. The first is from the requirement to have customer entryways on all sides of the building that face an abutting public street. The second waiver is for lighting. Light levels are not to exceed 0.2 footcandles at the property lines.

City staff reviewed the plans; comments are attached.

Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet, the requirements outlined in the Site Plan NRO § 190-146(D). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, specific reasons should be given. If the Planning Board chooses to approve this plan, staff recommends the following stipulations be made part of that approval:

1. The request for a waiver of § 190-172(E)(1), which requires all sides of a principal building that directly face an abutting public street shall feature at least one customer entrance, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
2. The request for a waiver of § 190- 89, which requires light levels not to exceed 0.2 footcandles at certain property lines depicted on the site plan, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
3. Prior to the Chair signing the plan, minor drafting corrections and standard notes will be added to the plan.
4. Prior to the Chair signing the plan, all conditions from the Planning Board approval letter will be added to the cover page of the final mylar and paper copies submitted to the City.

5. Prior to the Chair signing the plan, all comments in an e-mail from Joe Mendola, Street Construction Engineer, _____ shall be addressed to the satisfaction of the Engineering Department.
6. Prior to the issuance of a building permit, the electronic copy of the plan will be submitted to the City of Nashua.
7. Prior to the issuance of a building permit, stormwater documents will be submitted to City staff for review and recorded.
8. Prior to any work and a pre-construction meeting, a financial guarantee shall be approved.
9. Prior to the issuance of a certificate of occupancy, all off-site and on-site improvements will be completed.

PROPOSED SITE RE-DEVELOPMENT PLANS

for
ASSESSORS MAP H LOT 143
452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064

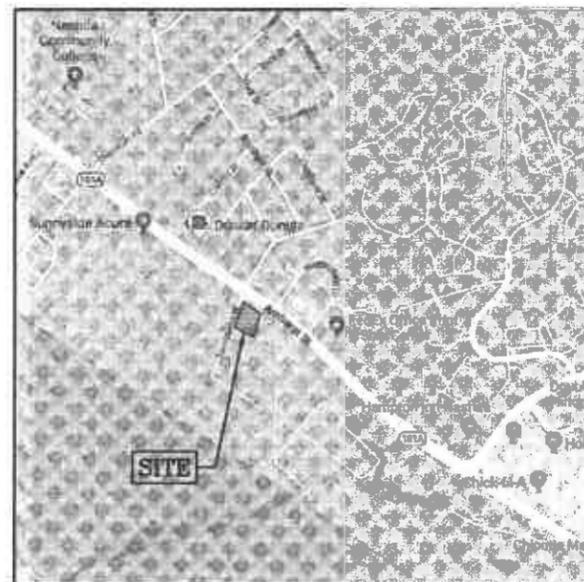
Prepared for:



165 FLANDERS ROAD, WESTBOROUGH, MA 01581



STATE LEGEND
(NOT TO SCALE)



LOCATION MAP
(NOT TO SCALE)

INDEX TO DRAWINGS

- CFG01.0 TITLE SHEET
- CFG02.0 ALTA/NSPS LAND TITLE SURVEY
- CFG03.0 DEMOLITION PLAN
- CFG04.0 SITE PLAN
- CFG04.1 SITE PLAN OVERLAY
- CFG05.0 GRADING & DRAINAGE PLAN
- CFG06.0 EROSION & SEDIMENTATION CONTROL PLAN
- CFG07.0 UTILITY PLAN
- CFG08.0 LANDSCAPE PLAN
- CFG09.0 DETAIL SHEET
- CFG09.1 DETAIL SHEET
- CFG09.2 DETAIL SHEET
- CFG09.3 DETAIL SHEET
- CFG10.0 LIGHTING PLAN
- CFG10.1 FIXTURE SPECIFICATION SHEET
- CFG11.0 FIRE SUPPRESSION PLAN (BY OTHERS)
- CFG12.0 PROPOSED CANOPY PLAN & ELEVATIONS
- CFG12.1 PROPOSED CANOPY DETAILS
- CFG16.0 TRUCK TURN PLAN (CFG TANKER)
- CFG16.1 TRUCK TURN PLAN (FIRE TRUCK)
- A-101 GROUND FLOOR PLAN*
- A-200 EXTERIOR ELEVATIONS*
- A-201 EXTERIOR ELEVATIONS*

* ARCHITECTURAL PLANS FOR PERMITTING USE ONLY. CONTRACTOR TO REFER TO STAMPED, SIGNED, SEALED PLANS LABELED "FOR CONSTRUCTION".

GPI Engineering Design Planning Construction Management
 44 Siles Road Suite One Salem, NH 03079
 603-853-0720 gpi.net.com

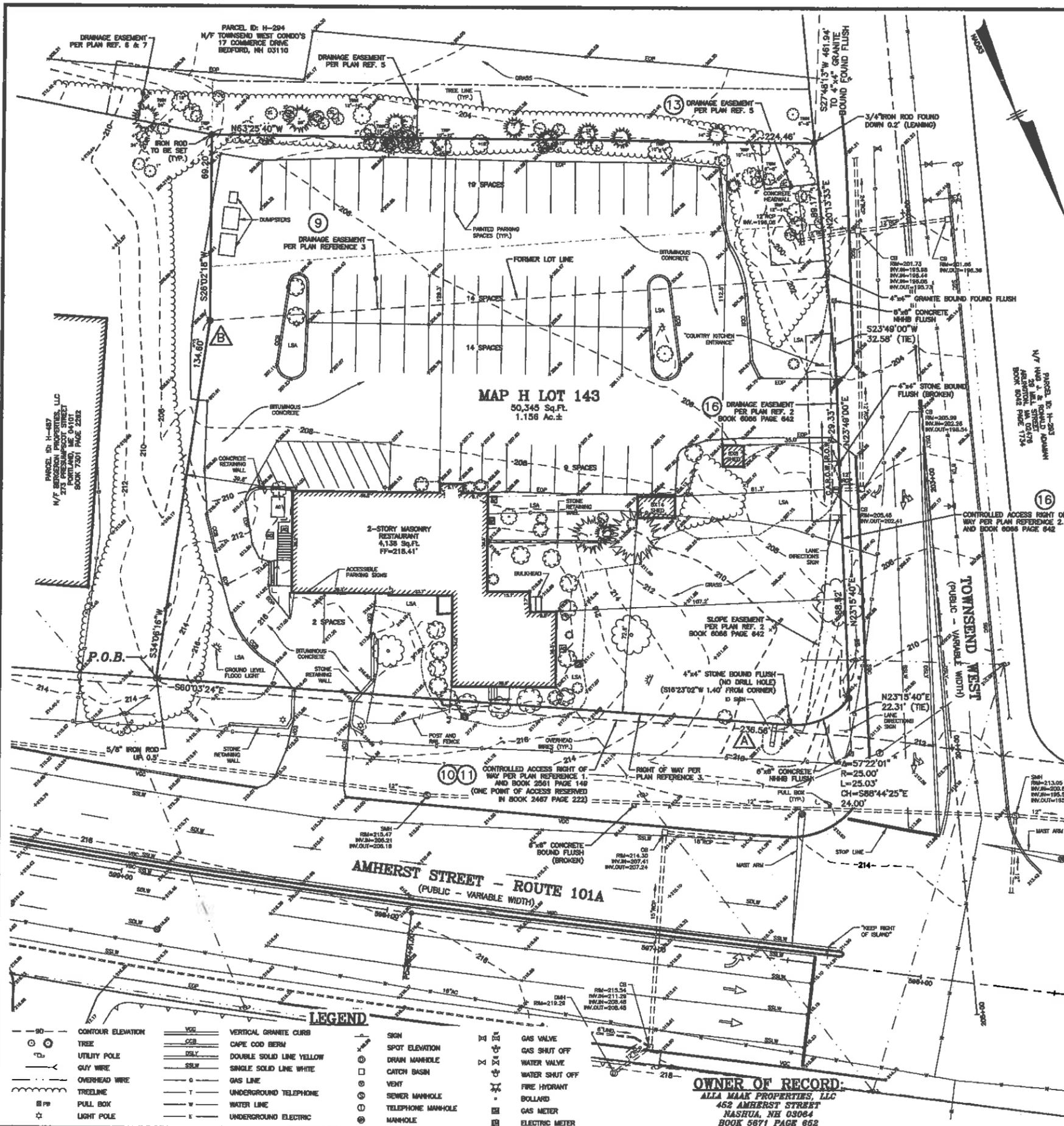
| PUBLIC UTILITIES | |
|---|-----------|
| UTILITIES | AVAILABLE |
| (SEWER) DIVISION OF PUBLIC WORKS WASTEWATER DEPARTMENT (603-389-3800) | YES |
| (WATER) PIEDMONT WATER WORKS (603-882-8191) | YES |
| (GAS) LIBERTY UTILITIES (603-833-4200) | YES |
| (ELECTRIC) EVERSOURCE (603-854-9229) | YES |
| (TELEPHONE) CONSOLIDATED COMMUNICATIONS (1-844-366-7229) | YES |



| REVISIONS | | | |
|-----------|---------|----------|--------------------------------------|
| NO. | DATE | REV. BY. | DESCRIPTION |
| 1 | 2/10/20 | CMT | REVISE SHEET CFG04.0 |
| 2 | 7/27/20 | CMT | REV. SHT CFG01.0-06.0,09.1-10.1,16.0 |

| | |
|--------------------|--------------------|
| 50,345 SQUARE FEET | 452 AMHERST STREET |
| 1.156 ACRES | NASHUA, NH 03064 |
| V# NEW | SCALE: AS NOTED |
| Store# NEW | DATE: 1/30/20 |
| Gas Station# NEW | FILE: 4478CVR.DWG |
| | DRAWN BY: CPS |
| | CHECKED BY: CMT |
| TITLE SHEET | CFG01.0 |

P:\Projects\04-144719\0478\0478.dwg 7/29/20 10:36 am 8:10 am



RECORD DESCRIPTION:

A certain tract or parcel of land, with the buildings thereon, in Nashua, County of Hillsborough and State of New Hampshire situated on the southerly side of New Hampshire Route 101A (Amherst Street) being shown as Lot #143 on a plan of land entitled "Lot Line Relocation Plan (lots 143 & 294 sh. 7)" Amherst St. (Rte. 101A & Townsend West Nashua, New Hampshire) prepared for Donald Reid, 54 Glen Drive, Hudson, N.H. Scale: 1" = 40'. Dated April 26, 1982, by Allan H. Swanson, Inc., and recorded in the Hillsborough County Registry of Deeds as Plan #14882, bounded and described as follows:

- 1) South 34° 04' 34" West, along said Lot 294 a distance of one hundred thirty-four and 90/100 (134.90) feet to an iron pin; thence
- 2) South 26° 10' 00" West, along said Lot 294 a distance of sixty-nine and 20/100 (69.20) feet to a point; thence turning and running
- 3) North 63° 26' 58" West, along said Lot 294 and a proposed 20 foot drainage easement as shown on said plan a distance of two hundred twenty-four and 30/100 (224.30) feet to a point on the easterly side of Townsend West; thence turning and running
- 4) North 23° 12' 18" East, along said Townsend West a distance of one hundred ninety and no/100 (190.00) feet to a point; thence
- 5) By a curve to the right having a radius of twenty-five and no/100 (25.00) feet a distance of forty-three and 51/100 (43.51) feet to a point on the southerly side of Amherst Street (Route 101A); thence
- 6) South 60° 04' 39" East, along said Amherst Street, a distance of two hundred thirty-six and 56/100 (236.56) feet to the point of beginning.

SCHEDULE B-2:

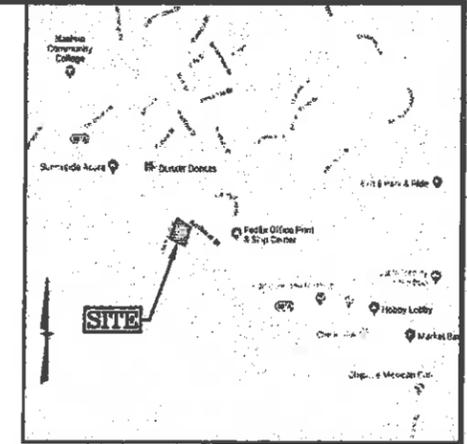
REFER TO FIRST AMERICAN TITLE INSURANCE COMPANY COMMITMENT NO. NCS-041581-N0U1 WITH AN EFFECTIVE DATE OF JANUARY 15, 2019 AT 8:00 A.M.

- 1 Any facts, rights, interests, or claims that are not shown by the Public Records but that could be ascertained by an inspection of the Land or that may be asserted by persons in possession of the Land. NON SURVEY MATTER.
- 2 Any encroachment, encumbrance, violation, variation, or adverse circumstance affecting the Title that would be disclosed by an accurate and complete land survey of the Land and not shown by the Public Records. NON SURVEY MATTER.
- 3 Any lien or right to a fee, for services, labor, or material theretofore or hereafter furnished, imposed by law and not shown in the public records. NON SURVEY MATTER.
- 4 Real estate taxes and municipal charges as follows: NON SURVEY MATTER.
- 5 Title to and rights of the public and others entitled thereto in and to those portions of the Land lying within the bounds of adjacent streets, roads, and ways. CURRENT RIGHT OF WAY LINES DEPICTED HEREON.
- 6 The exact acreage or square footage being other than as stated in Schedule A or the plan(s) therein referred to. SURVEYED AREA DEPICTED HEREON.
- 7 Mortgage by Alla Mook Properties, LLC to Enterprise Bank in the original principal amount of \$200,000.00, dated July 28, 2014, recorded with said Registry at Book 6678, Page 1346. NON SURVEY MATTER.
- 8 Assignment of Rents by Alla Mook Properties, LLC to Enterprise Bank, dated July 28, 2014, recorded with said Registry at Book 6678, Page 1361. NON SURVEY MATTER.
- 9 Such state of facts as are disclosed on plan entitled "Plan of Land Northwest Industrial Park Townsend West Nashua, N.H., Surveyed for Ferd Associates, Aug. 1974 prepared by W. Robert Motta & Associates, recorded with said Registry as Plan No. 11117 (2 sheets). FORMER DRAINAGE EASEMENT DEPICTED ON SAID PLAN IS SHOWN HEREON.
- 10 Control Access Deed granted by Carl D. Fox and Jeanne P. Fox to the State of New Hampshire, dated July 1, 1976, recorded with said Registry at Book 2467, Page 222. AFFECTS THE SURVEY TRACT AND THE CONTROLLED ACCESS RIGHT OF WAY IS SHOWN HEREON.
- 11 Taking by Petition and Commissioners' Return of Highway Layout Nashua U-010-1(10) - P-13330-B 1977, including rights and easements pertaining to access, light, air, view, slope, embankment and drainage, dated September 22, 1977, recorded with said Registry at Book 2551, Page 148. AFFECTS THE SURVEY TRACT AND THE CONTROLLED ACCESS RIGHT OF WAY IS SHOWN HEREON.
- 12 Easement granted by Kenneth C. Jones and Jeanette D. Jones to the City of Nashua, dated February 1982, recorded with said Registry at Book 2940, Page 478. AFFECTS THE SURVEY TRACT BUT IS NOW PLUFTABLE.
- 13 Such state of facts as are disclosed on plan entitled "Lot Line Relocation Plan (Lots 143 & 294 sh. 7) Amherst St. (Rte. 101A) Nashua, New Hampshire, Prepared for Donald Reid, 26 April 1982 prepared by Allan H. Swanson, Inc., recorded with said Registry as Plan No. 14882. DRAINAGE EASEMENT DEPICTED ON SAID PLAN IS SHOWN HEREON.
- 14 Such state of facts as are disclosed on plan entitled "Subdivision Plan (Lot 294 Map 'H') Amherst St., Nashua, New Hampshire, Prepared for Samuel A. Tamposi Jr., 20 January 1983 prepared by Allan H. Swanson, Inc., recorded with said Registry as Plan No. 15430. DO NOT AFFECT THE SURVEY TRACT.
- 15 Such state of facts as are disclosed on plan entitled "Subdivision Plan (Lot 294 Map 'H') Amherst St., Nashua, New Hampshire, Prepared for Samuel A. Tamposi Jr., 20 January 1983, prepared by Allan H. Swanson, Inc., recorded with said Registry as Plan No. 15540. DO NOT AFFECT THE SURVEY TRACT.
- 16 Deed, rights and easements granted by Alla Mook Properties, L.L.C. to State of New Hampshire, dated February 18, 1999, recorded with said Registry at Book 6066, Page 642. DOES AFFECT THE SURVEY TRACT AND THE C.A.R.D. LINE, DRAINAGE EASEMENT, & SLOPE EASEMENT ARE SHOWN HEREON.

POTENTIAL ENCROACHMENTS:

- ▲ THE ID SIGN ENCRACHES INTO THE NH ROUTE 101A RIGHT OF WAY.
- ▲ THE PINED PARKING AREA AND THE GRADING/ CLEARING ASSOCIATED WITH SAID PARKING ENCRACH ONTO THE ADJUTING PROPERTY.

GRAPHIC SCALE



LOCATION MAP
(NOT TO SCALE)

NOTES:

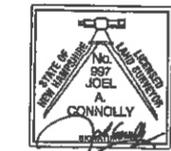
- 1) THIS PLAN IS THE RESULT OF AN ON-THE-GROUND FIELD SURVEY PERFORMED BY THIS OFFICE BETWEEN JANUARY 10 AND JANUARY 11, 2019.
- 2) BASED ON A SITE VISIT BY GOM ENVIRONMENTAL SERVICES, INC. THERE ARE NO WETLANDS ON THE SURVEY TRACT.
- 3) BEARINGS SHOWN HEREON ARE BASED ON NAD83 PER GPS OBSERVATIONS PERFORMED BY THIS OFFICE ON JANUARY 11, 2019.
- 4) ELEVATIONS SHOWN HEREON ARE BASED ON NAVD83 PER GPS OBSERVATIONS PERFORMED BY THIS OFFICE ON JANUARY 11, 2019.
- 5) LOCATION OF UNDERGROUND UTILITIES IS APPROXIMATE ONLY. ADDITIONAL UNDERGROUND UTILITIES OTHER THAN THOSE SHOWN MAY BE ENCOUNTERED. INVERTS ARE LISTED IN A CLOCKWISE DIRECTION ENDING WITH THE INVERT OUT (UNLESS OTHERWISE NOTED).
- 6) THE SURVEY TRACT IS NOT LOCATED IN A SPECIAL FLOOD HAZARD AREA (100 YEAR FLOOD) PER FLOOD INSURANCE RATE MAP NUMBER 3301104920, WITH AN EFFECTIVE DATE OF SEPTEMBER 26, 2009.
- 7) A TOTAL OF 66 (66 REGULAR, 2 ACCESSIBLE) CLEARLY IDENTIFIABLE PARKING SPACES WERE OBSERVED IN CONDUCTING THIS SURVEY.
- 8) NO EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION, OR BUILDING ADDITIONS WAS OBSERVED IN THE PROCESS OF CONDUCTING THE FIELDWORK.

PLAN REFERENCES:

- 1) NHDT PLANS FED. PROJECT NO. U-010-1(10), NH PROJECT NO. P-1330-B.
- 2) NHDT PLANS FED. PROJECT NO. CM-X-5315(30), NH PROJECT NO. 12244.
- 3) HILLSBOROUGH COUNTY REGISTRY OF DEEDS H.C.R.D. PLAN 11117.
- 4) H.C.R.D. PLAN 11716.
- 5) H.C.R.D. PLAN 14862.
- 6) H.C.R.D. PLAN 15430.
- 7) H.C.R.D. PLAN 15540.
- 8) SITE PLAN, AMHERST ST (RTE 101-1), NASHUA, NEW HAMPSHIRE, PREPARED FOR DONALD REID, DATED: MAY 29, 1982 (REV. FEB 19, 1982) PREPARED BY ALLAN H. SWANSON, INC. ON FILE AT THE CITY OF NASHUA PLANNING DEPARTMENT (NR046).

CERTIFICATION:

TO CUMBERLAND FARMS INC. AND FIRST AMERICAN TITLE INSURANCE COMPANY:
THIS IS TO CERTIFY THAT THIS MAP OR PLAN AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2018 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 1, 2, 3, 4, 5, 7(a), 7(b)1, 8, 9, 10(a), 11, 13, 18, & 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED FEBRUARY 4, 2019.



JOEL A. CONNOLLY, NH LLS #697
DATE OF PLAT OR MAP: 7/27/2020

GPI Engineering Design Construction Management
Greenman-Pedersen, Inc.
44 Stiles Road
Suite One
Salem, NH 03079

| REVISIONS | | | 50,345 SQUARE FEET |
|-----------|---------|---------|-------------------------|
| NO. | DATE | REV. BY | DESCRIPTION |
| 1 | 6/28/20 | JAC | LOCATE ADDITIONAL TREES |
| 2 | 7/27/20 | JAC | MISC REVISIONS |
| | | | 1.156 ACRES |
| | | | V# |
| | | | Store# |
| | | | Gas Station# |

452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064

SCALE: 1"=20'
DATE: 1/30/20
FILE: 4476TWS.DWG
DRAWN BY: NIG
CHECKED BY: JAC

Cumberland CUMBERLAND FARMS INC.
165 FLANDERS ROAD
WESTBOROUGH, MA 01581

ALTA/NSPS LAND TITLE SURVEY CFG02.0

OWNER OF RECORD:
ALLA MOOK PROPERTIES, LLC
452 AMHERST STREET
NASHUA, NH 03064
BOOK 5671 PAGE 652

LEGEND

| | | | | | |
|----|-------------------|------|--------------------------|----|-------------------|
| 90 | CONTOUR ELEVATION | VCC | VERTICAL GRANITE CURB | SP | SPOT ELEVATION |
| TR | TREE | CSB | CAPE COD BERM | DM | DRAIN MANHOLE |
| UP | UTILITY POLE | DSLY | DOUBLE SOLID LINE YELLOW | WB | WATER VALVE |
| GW | GUY WIRE | SSW | SINGLE SOLID LINE WHITE | CB | CATCH BASIN |
| OW | OVERHEAD WIRE | GL | GAS LINE | VT | VENT |
| TW | TREELINE | T | UNDERGROUND TELEPHONE | SM | SEWER MANHOLE |
| PL | PULL BOX | WL | WATER LINE | TM | TELEPHONE MANHOLE |
| LP | LIGHT POLE | UE | UNDERGROUND ELECTRIC | M | MANHOLE |
| | | | | GV | GAS VALVE |
| | | | | GS | GAS SHUT OFF |
| | | | | WV | WATER VALVE |
| | | | | WS | WATER SHUT OFF |
| | | | | FD | FIRE HYDRANT |
| | | | | GM | GAS METER |
| | | | | EM | ELECTRIC METER |

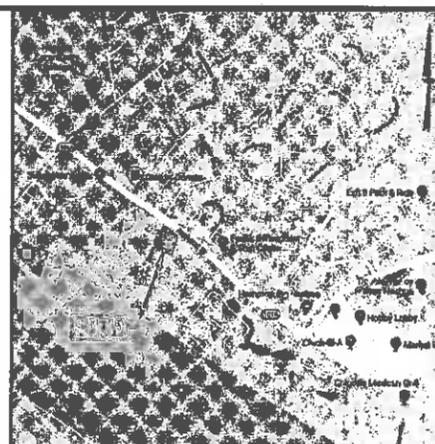
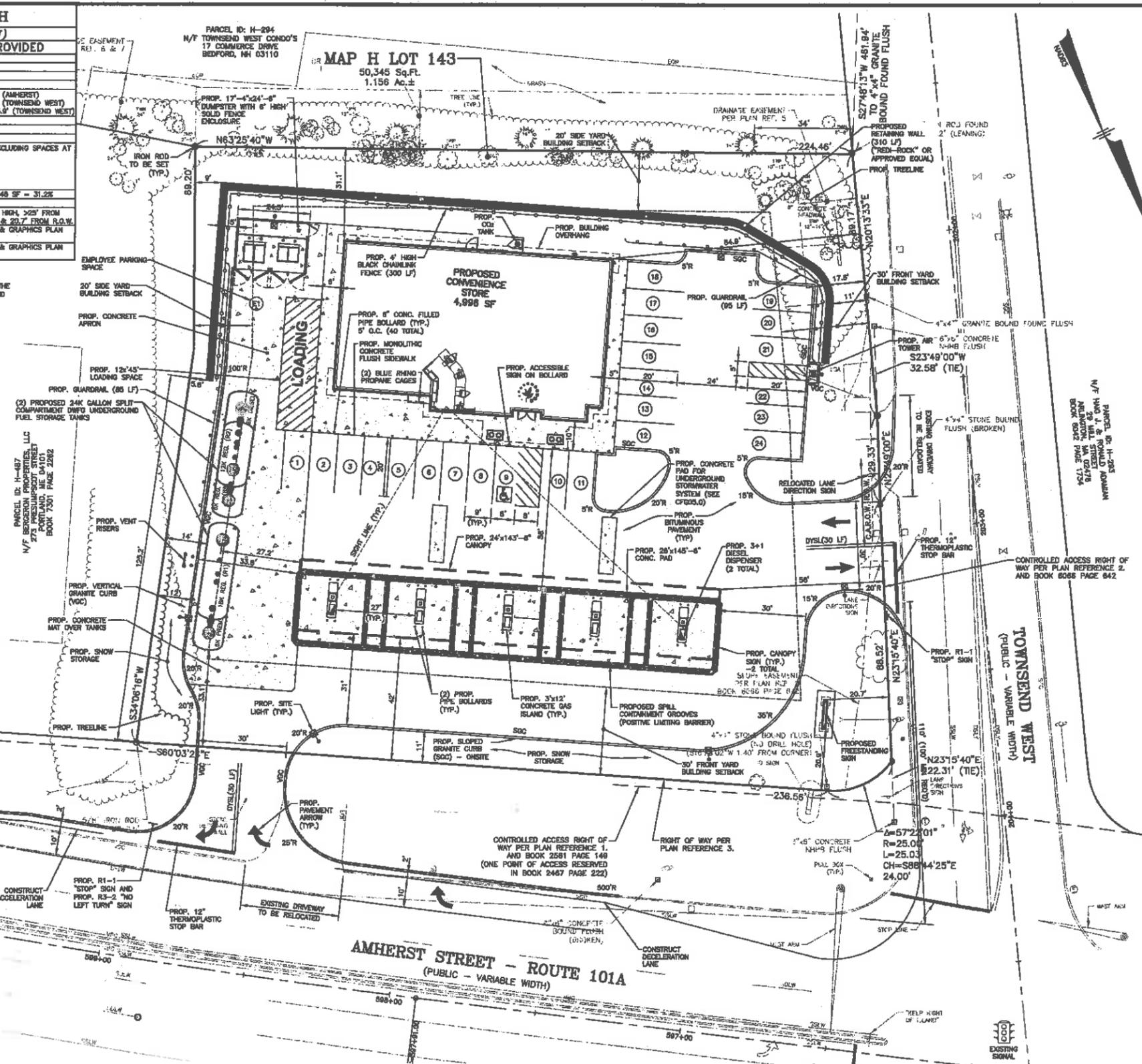
N:\Projects\2019\03\04\55353.dwg 3/14/2019 2:08:56pm jconnolly

TABLE OF ZONING REGULATIONS - NASHUA, NH

| DESCRIPTION | REQUIRED | PROVIDED |
|---------------------------------------|---|---|
| MINIMUM LOT AREA - Sq. Ft. | 30,000 SF | 50,345 SF |
| MINIMUM LOT FRONTAGE | 150' | 236.56' |
| MINIMUM LOT DEPTH | 150' | 252.45' |
| MINIMUM LOT WIDTH | 120' | 224.45' |
| MINIMUM FRONT YARD BUILDING SETBACK | 30' | CANOPY - 45' (AMHERST) CANOPY - 58' (TOWNSEND WEST) O-STORE - 84.9' (TOWNSEND WEST) |
| MINIMUM SIDE YARD BUILDING SETBACK | 20' | 30.9' |
| MINIMUM REAR YARD BUILDING SETBACK | 20' | N/A |
| PARKING SPACE DIMENSIONS | 9' x 20' | 9' x 20' |
| MINIMUM NUMBER PARKING SPACES | CONVENIENCE STORE: 1 SPACE/200 SF GFA 4,998 SF/200 SF = 25 SPACES | 25 SPACES (EXCLUDING SPACES AT PUMPS) |
| MINIMUM OPEN SPACE | 208' | 15,661 SF/50,345 SF = 31.2% |
| MAXIMUM BUILDING HEIGHT | 75' (6 STORES) | < 65' |
| FREESTANDING SIGN AREA/HEIGHT/SETBACK | AREA=100 SF MAX., 20' MAX. HEIGHT, 25' FROM INTERSECTIONS & 20.7' FROM R.O.W. | 95.64 SF, 20' HIGH, 20.7' FROM INTERSECTIONS & 20.7' FROM R.O.W. |
| WALL SIGN AREA | 1.5 SF/LINEAR FT OF BUILDING, (3 WALL SIGNS MAX. ALLOWED) | SEE SITE SIGN & GRAPHICS PLAN |
| CANOPY SIGNS | AREA ALLOWED IS COMPUTED AS A PORTION OF ALLOWED WALL SIGNAGE | SEE SITE SIGN & GRAPHICS PLAN |

* VARIANCE GRANTED FROM LAND USE CODE SECTION 140-16, TABLE 16-1 (403) ON JUNE 9, 2020 BY THE NASHUA ZONING BOARD OF ADJUSTMENT TO ALLOW A CONVENIENCE STORE/GAS STATION WHERE 70% OF THE BUILDING GROSS FLOOR AREA IS OTHERWISE REQUIRED TO BE RESERVED FOR USES IN THE "INDUSTRIAL AND MANUFACTURING" CATEGORY, P/MU ZONE, WARD 2.

| SIGN KEY | | |
|------------------|------------|------------------------------|
| SIGN I.D. NUMBER | TEXT/COLOR | SIZE/REMARKS |
| R1-1 | STOP R/W | 30" x 30" NEW SIGN WITH POST |
| R7-8 | G/B/W | 12" x 18" NEW SIGN WITH POST |
| R3-2 | B/W/R | 24" x 24" NEW SIGN WITH POST |



LOCATION MAP
(NOT TO SCALE)

- NOTES:**
- EXISTING BOUNDARY AND PLANIMETRIC INFORMATION AS SHOWN WAS TAKEN FROM AN ACTUAL FIELD SURVEY BY THIS OFFICE.
 - TAX MAP H LOT 143
 - ZONING DISTRICT: PARK INDUSTRIAL (PI) & MIXED USE OVERLAY (MU)
 - LOT AREA = 50,345 Sq.Ft. = 1.156 Ac.±
 - EXISTING USE: COUNTRY TAVERN & GREENHOUSE CATERING
PROPOSED USE: RETAIL MOTOR FUEL OUTLET WHICH INCLUDES A 4,998 SF CONVENIENCE STORE AND A FUEL DISPENSING AREA WITH 5 DISPENSERS (10 FUELING POSITIONS) AND AN OVERHEAD CANOPY.
 - ALL BUILDINGS AND SITE CONSTRUCTION SHALL COMPLY WITH THE RULES AND REGULATIONS OF THE AMERICANS WITH DISABILITIES ACT (ADA) AS REVISED IN 2010, OR LATEST EDITION.
 - WRITTEN DIMENSIONS ON THIS PLAN TAKE PRECEDENCE OVER SCALED DIMENSIONS. THE CONTRACTOR SHALL USE CAUTION WHEN SCALING REPRODUCED PLANS. IN THE EVENT OF A CONFLICT BETWEEN THIS PLAN SET AND ANY OTHER DRAWINGS AND/OR SPECIFICATIONS, THE ENGINEER SHALL BE NOTIFIED BY THE CONTRACTOR.
 - THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIGSAFE 811 PRIOR TO ANY EXCAVATION.
 - ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF NASHUA AND THE STATE OF NEW HAMPSHIRE.
 - ALL CONSTRUCTION SHALL CONFORM TO THESE PLANS AND THE STANDARD CONSTRUCTION DRAWINGS AS SUPPLIED BY CUMBERLAND FARMS.
 - A SIGN PERMIT SHALL BE OBTAINED PRIOR TO INSTALLATION.
 - THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION AND FOR CONDITIONS AT THE SITE. THESE PLANS, PREPARED BY GREENMAN-PEDERSEN, INC., DO NOT EXTEND TO OR INCLUDE SYSTEMS PERTAINING TO THE SAFETY OF THE CONSTRUCTION CONTRACTOR OR THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE SEAL OF THE SURVEYOR AND/OR ENGINEER AS INDICATED IN THE PLAN SET DOES NOT EXTEND TO ANY SUCH SAFETY SYSTEMS THAT MAY NOW OR HEREAFTER BE INCORPORATED INTO THESE PLANS. THE CONSTRUCTION CONTRACTOR SHALL PREPARE AND/OR OBTAIN THE APPROPRIATE SAFETY SYSTEMS WHICH MAY BE REQUIRED BY THE U.S. OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA) AND/OR LOCAL REGULATIONS.
 - ALL SNOW SHALL BE STORED IN THE AREA(S) DEPICTED ON THIS PLAN AS SNOW STORAGE AREAS. IN THE EVENT THAT THE AREAS APPROVED FOR SNOW STORAGE BECOME FULL, THE OWNER SHALL REASONABLY REMOVE EXCESS SNOW FROM THE SITE, AND SHALL NOT ALLOW SNOW TO BE STORED WITHIN PARKING LOTS OR TRAVEL AISLES.
 - ALL WASTE MATERIALS AND RECYCLABLES SHALL BE CONTAINED WITHIN THE BUILDING(S) OR APPROVED STORAGE FACILITIES AND SHALL NOT BE OTHERWISE STORED ON PROPERTY.
 - REFER TO DETAIL SHEETS FOR ALL SITE DEVELOPMENT DETAILS AND INFORMATION.
 - EXISTING IMPERVIOUS COVERAGE = 30,850 SF (61.3%)
PROPOSED IMPERVIOUS COVERAGE = 34,854 SF (68.8%)
 - THE PROPOSED STORE SHALL BE OPEN 24 HOURS.
 - OFFSITE ROADWAY IMPROVEMENTS ALONG AMHERST STREET SHOWN ARE FOR CONCEPTUAL PURPOSES ONLY. REFER TO FINAL OFFSITE ROADWAY IMPROVEMENT PLANS FOR ADDITIONAL CONSTRUCTION INFORMATION AND DETAILS.

LEGEND

| | | | |
|-----|--------------------------|---|-------------------|
| VGC | VERTICAL GRANITE CURB | ○ | SIGN |
| CCB | CAPE COD BERM | □ | SPOT ELEVATION |
| DSL | DOUBLE SOLID LINE YELLOW | ○ | DRAIN MANHOLE |
| SSL | SINGLE SOLID LINE WHITE | □ | CATCH BASIN |
| ○ | GAS LINE | ○ | VENT |
| — | UNDERGROUND TELEPHONE | ○ | SEWER MANHOLE |
| — | WATER LINE | ○ | TELEPHONE MANHOLE |
| — | UNDERGROUND ELECTRIC | ○ | MANHOLE |
| — | POST & RAIL FENCE | ○ | GAS VALVE |
| — | GUARDRAIL | ○ | GAS SHUT OFF |
| — | CONTOUR ELEVATION | ○ | WATER VALVE |
| — | TREE | ○ | WATER SHUT OFF |
| — | UTILITY POLE | ○ | FIRE HYDRANT |
| — | GLY WIRE | ○ | BOLLARD |
| — | OVERHEAD WIRE | ○ | GAS METER |
| — | TREELINE | ○ | ELECTRIC METER |
| — | PULL BOX | ○ | LIGHT POLE |
| ○ | NUMBER OF PARKING SPACES | | |



OWNER OF RECORD:
PARCEL ID: H-143
ALLA MAAR PROPERTIES, LLC
462 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064-1228
BOOK 6671 PAGE 652

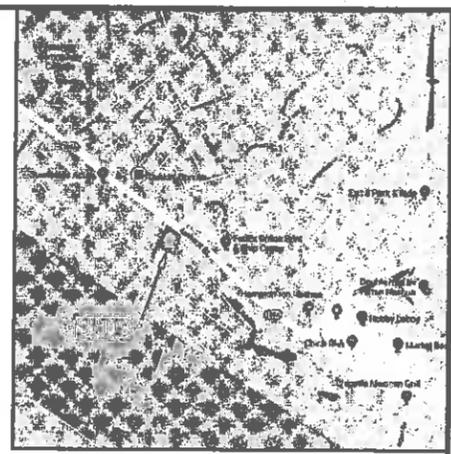
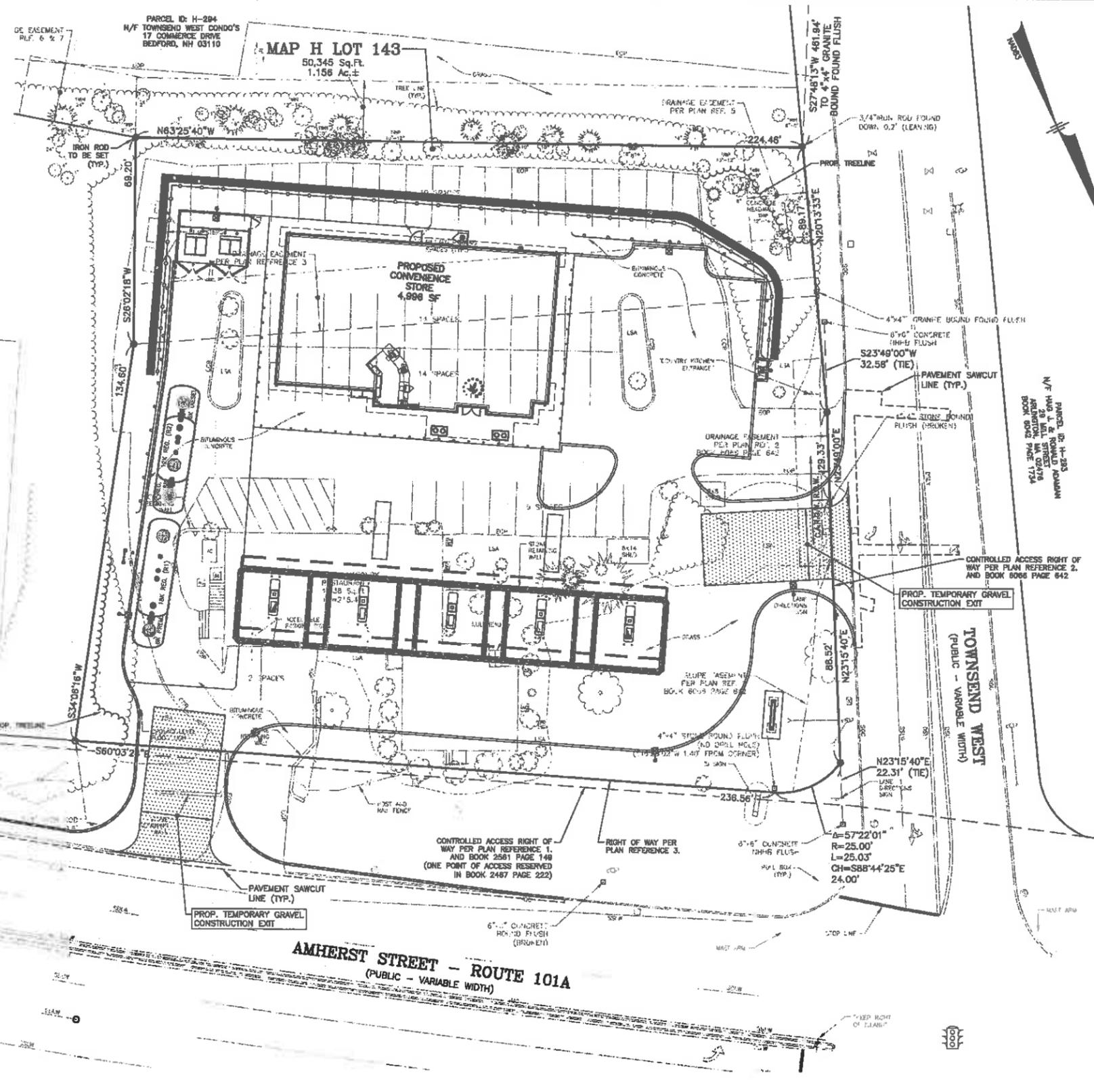


| REVISIONS | | | |
|-----------|---------|----------|---------------------------|
| NO. | DATE | REV. BY. | DESCRIPTION |
| 1 | 2/10/20 | CMT | REVISE ZONING |
| 2 | 4/15/20 | CMT | ADD OFFSITE IMPROVEMENTS. |
| 3 | 7/27/20 | CMT | MISC. REVISIONS |

50,345 SQUARE FEET
1.156 ACRES
V#
Store#
Gas Station#

GPI Engineering Design Planning Construction Management
603.885.0720 GPINET.COM
Greenman-Pedersen, Inc.
44 Stiles Road
Suits One
Nashua, NH 03079

452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064
CUMBERLAND FARMS INC.
185 FLANDERS ROAD
WESTBOROUGH, MA 01581
SITE PLAN
SCALE: 1"=20'
DATE: 1/30/20
FILE: 4478SP.dwg
DRAWN BY: CPS
CHECKED BY: CMT
CFG04.0



LOCATION MAP
(NOT TO SCALE)

- NOTES:**
- 1) THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED LIMITS OF SITE IMPROVEMENTS AND DEMOLITION ACTIVITIES OVERLAYED ON THE EXISTING CONDITIONS.
 - 2) REFER TO SHEETS 5-9 OF 13 FOR ADDITIONAL LAYOUT AND DETAILED INFORMATION.

PARCEL ID: H-487
N/F 27 PRESUMPTORY STREET
PORTLAND, ME 04101
BOOK 7501 PAGE 2382

PARCEL ID: H-383
N/F 18 MILL STREET
PORTLAND, ME 04101
BOOK 6842 PAGE 1734

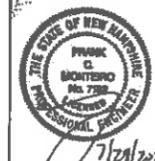
LEGEND

| | | | |
|--|--------------------------|--|-------------------|
| | VERTICAL GRANITE CURB | | SIGN |
| | CAPE COD BERM | | SPOT ELEVATION |
| | DOUBLE SOLID LINE YELLOW | | DRAIN MANHOLE |
| | SINGLE SOLID LINE WHITE | | CATCH BASIN |
| | GAS LINE | | VENT |
| | UNDERGROUND TELEPHONE | | SEWER MANHOLE |
| | WATER LINE | | TELEPHONE MANHOLE |
| | UNDERGROUND ELECTRIC | | MANHOLE |
| | POST & RAIL FENCE | | GAS VALVE |
| | GUARDRAIL | | GAS SHUT OFF |
| | CONTOUR ELEVATION | | WATER VALVE |
| | TREE | | WATER SHUT OFF |
| | UTILITY POLE | | FIRE HYDRANT |
| | GUY WIRE | | BOLLARD |
| | OVERHEAD WIRE | | GAS METER |
| | TREENLINE | | ELECTRIC METER |
| | PULL BOX | | LIGHT POLE |
| | NUMBER OF PARKING SPACES | | |



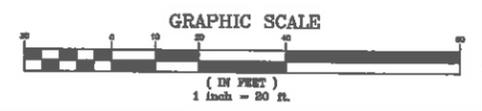
AMHERST STREET - ROUTE 101A
(PUBLIC - VARIABLE WIDTH)

OWNER OF RECORD:
PARCEL ID: H-143
ALLA MARK PROPERTIES, LLC
452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064-1228
BOOK 6671 PAGE 852



| REVISIONS | | | |
|-----------|---------|----------|-----------------|
| NO. | DATE | REV. BY. | DESCRIPTION |
| 1 | 7/27/20 | CMT | MISC. REVISIONS |

50,345 SQUARE FEET
1.156 ACRES
V#
Store#
Gas Station#



GPI Engineering Design Planning Construction Management
Greenman-Pedersen, Inc.
44 Stiles Road
Suite One
Salem, NH 03079

452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064
Cumberland Farms
CUMBERLAND FARMS INC.
165 FLANDERS ROAD
WESTBOROUGH, MA 01581
SCALE: 1"=20'
DATE: 1/30/20
FILE: 4478SP.dwg
DRAWN BY: CPS
CHECKED BY: CMT

SITE PLAN OVERLAY CFG04.1

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| DRAINAGE PIPE SCHEDULE | | | | |
|------------------------|--------------------|--------------|----------------------------|---------------------|
| FROM STRUCTURE NUMBER | PIPE SIZE (INCHES) | TYPE OF PIPE | APPROX. PIPE LENGTH (FEET) | TO STRUCTURE NUMBER |
| CS-1(FD) | 12 | HOPE | 87 | CS-3 |
| CS-2(FD) | 12 | HOPE | 44 | U/G DET-1 |
| CS-3 | 12 | HOPE | 13 | DMH-3 |
| CS-4 | 12 | HOPE | 46 | CS-2(FD) |
| DMH-1 | 12 | HOPE | 89 | EX. CS-A |
| DMH-2 | 8 | HOPE | 8 | O/W SEP-1 |
| DMH-2 | 12 | HOPE | 8 | DMH-3 |
| DMH-3 | 12 | HOPE | 88 | DMH-4 |
| FES-1 | 12 | HOPE | 8 | DMH-4 |
| O/W SEP-1 | 8 | HOPE | 6 | DMH-3 |
| OCS-1 | 12 | HOPE | 58 | CS-3 |
| TD-1 | 12 | HOPE | 7 | DMH-2 |
| UG DET-1 | 24 | HOPE | 10 | OCS-1 |
| YD-1 | 12 | HOPE | 32 | DMH-1 |

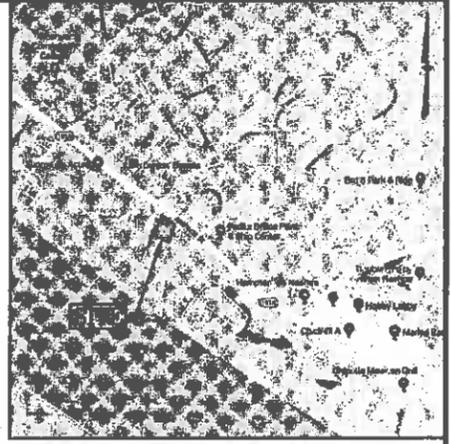
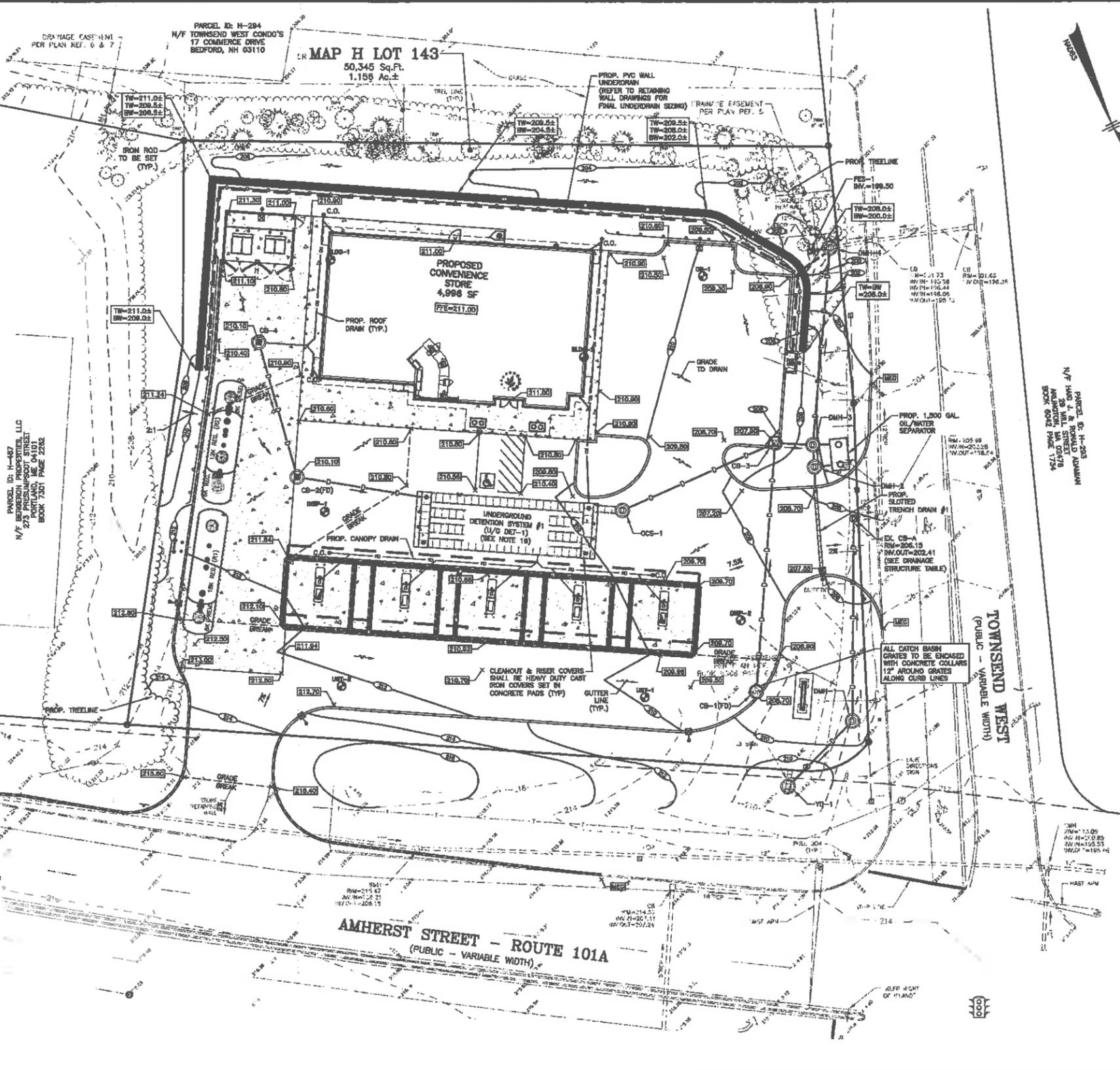
DRAINAGE STRUCTURES

CS-1(FD) RM=208.70 INV.OUT=204.70
 CS-2(FD) RM=210.10 INV.IN=205.85(CS-4) INV.OUT=205.80
 CS-3 RM=207.80 INV.IN=202.10(OCS-1) INV.OUT=202.00
 CS-4 RM=210.10 INV.IN=204.80(YD-1) INV.OUT=203.20
 DMH-1 RM=209.20 INV.IN=204.80(YD-1) INV.OUT=203.20
 DMH-2 RM=208.20 INV.IN=199.40(FES-1) INV.IN=197.00(DMH-3) INV.OUT=198.00
 DMH-3 RM=208.20 INV.IN=201.50(O/W SEP-1) INV.OUT=201.50
 DMH-4 RM=201.50 INV.IN=199.40(FES-1) INV.IN=197.00(DMH-3) INV.OUT=198.00
 FES-1 RM=199.50
 OCS-1 RM=208.20 INV.OUT=203.00
 TD-1 RM=208.20 INV.OUT=203.00
 UG DET-1 RM=208.20 INV.OUT=203.00
 YD-1 RM=203.20 INV.OUT=203.20

EX. CS-A RM=208.15 INV.IN=202.50(DMH-1) (REPLACE CS-A FRAME & GRATE WITH NEW HANHOLE FRAME & COVER)
 OUTLET CONTROL STRUCTURE #1 (OCS-1) RM=208.15 INV.IN=203.00(U/G DET-1) INV.OUT=203.00 (SEE DETAIL)
 SLOTTED TRENCH DRAIN #1 (TD-1) RM=207.55-208.70 INV.OUT=204.30
 PROP. 1,000 GAL. OIL/WATER SEPARATOR (O/W SEP-1) RM=208.50 INV.IN=201.35(DMH-2) INV.OUT=201.30 (SEE DETAIL)
 PROP. UNDERGROUND DETENTION SYSTEM #1 (U/G DET-1) (4) 36" SOLID (WT) HOPE PIPES 4 ROWS @ 80' ROW S=0.000 FT/FT INV.PIPE=203.00 INV.IN=208.50(RD) INV.IN=208.00(CS-2) INV.OUT=203.00 (SEE DETAIL)

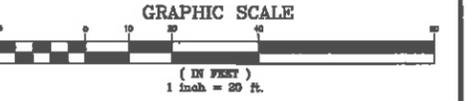
(FD) DENOTES FIRST DEFENSE UNIT OR APPROVED EQUAL
 (WT) = WATER TIGHT

| LEGEND | |
|--------|---|
| VC | VERTICAL GRANITE CURB |
| CB | CAPE COD BERM |
| DSLY | DOUBLE SOLID LINE YELLOW |
| SSW | SINGLE SOLID LINE WHITE |
| ○ | GAS LINE |
| — | UNDERGROUND TELEPHONE |
| — | WATER LINE |
| — | UNDERGROUND ELECTRIC |
| — | POST & RAIL FENCE |
| — | GUARDRAIL |
| 90 | CONTOUR ELEVATION |
| ○ | TREE |
| ○ | UTILITY POLE |
| — | DUY WIRE |
| — | OVERHEAD WIRE |
| — | TREELINE |
| — | FULL BOX |
| — | MEET EXISTING GRADE |
| 210.80 | PROP. SPOT ELEVATION |
| — | PROP. CONTOUR ELEVATION |
| TW | TOP OF WALL ELEV. |
| BW | BOTTOM OF WALL ELEV. |
| ○ | BORING LOCATION PER ATC SITE PLAN WITH GEOTECHNICAL BORINGS |
| ○ | SIGN |
| ○ | SPOT ELEVATION |
| ○ | DRAIN MANHOLE |
| ○ | CATCH BASIN |
| ○ | SEWER MANHOLE |
| ○ | TELEPHONE MANHOLE |
| ○ | GAS VALVE |
| ○ | GAS SHUT OFF |
| ○ | WATER VALVE |
| ○ | WATER SHUT OFF |
| ○ | FIRE HYDRANT |
| ○ | BOLLARD |
| ○ | GAS METER |
| ○ | ELECTRIC METER |
| ○ | LIGHT POLE |
| ○ | PROP. CLEANOUT |
| ○ | PROP. CATCH BASIN |
| ○ | PROP. DRAIN MANHOLE |



LOCATION MAP
(NOT TO SCALE)

- NOTES:**
- 1) ALL SITE DRAINAGE PIPE SHALL BE CORRUGATED HIGH-DENSITY POLYETHYLENE PIPE WITH STANDARD JOINTS, DUAL-WALL, SMOOTH INTERIOR, AS MANUFACTURED BY ADS, INC., OR APPROVED EQUAL, UNLESS OTHERWISE NOTED ON PLAN. THE UNDERGROUND DETENTION SYSTEM SHALL HAVE WATER TIGHT JOINTS MEETING ASTM D3212 SPECIFICATIONS.
 - 2) ALL ROOF AND CANOPY DRAIN PIPE SHALL BE 6" PVC (SDR-35).
 - 3) ELEVATIONS ARE BASED ON NAVD88 DATUM.
 - 4) ALL PROPOSED ELEVATIONS AS SHOWN ARE BOTTOM OF CURB ELEVATIONS, UNLESS OTHERWISE NOTED.
 - 5) ANY UTILITY FIELD ADJUSTMENTS SHALL BE APPROVED BY THE ENGINEER OF RECORD AND COORDINATED WITH THE APPROPRIATE LOCAL UTILITY COMPANY.
 - 6) THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR IS TO VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST INVERT (POINT OF CONNECTION) AND PROGRESS UP GRADIENT. PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND INSTALLATIONS SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
 - 7) ALL CONSTRUCTION SHALL CONFORM TO MUNICIPAL DFW AND ALL APPLICABLE STATE AND FEDERAL STANDARDS.
 - 8) THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIG-SAFE (DIAL 811) PRIOR TO COMMENCING ANY EXCAVATION.
 - 9) THIS SITE WILL REQUIRE A USEPA NPDES PERMIT FOR STORMWATER DISCHARGE FOR THE SITE CONSTRUCTION SINCE THE DISTURBANCE EXCEEDS ONE ACRE (ACTUAL DISTURBANCE = 28,000 SF). THE CONSTRUCTION SITE OPERATOR SHALL DEVELOP AND IMPLEMENT A CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN (SWPPP), WHICH SHALL REMAIN ON SITE AND MADE ACCESSIBLE TO THE PUBLIC. A COMPLETED NOTICE OF TERMINATION (NOT) SHALL BE SUBMITTED TO NPDES PERMITTING AUTHORITY WITHIN 30 DAYS AFTER EITHER OF THE FOLLOWING CONDITIONS HAVE BEEN MET: FINAL STABILIZATION HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE OR ANOTHER OPERATOR/PERMITTEE HAS ASSUMED CONTROL OVER ALL AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
 - 10) ANY UTILITIES TO BE TAKEN OUT OF SERVICE SHALL BE DISCONNECTED AS DIRECTED BY UTILITY COMPANY AND LOCAL DFW.
 - 11) ALL TRAFFIC CONTROL AND TEMPORARY CONSTRUCTION SIGNAGE ARRANGEMENTS, ACCEPTABLE TO NHDOT AND MASSDOT DEPARTMENT OF PUBLIC WORKS, SHALL BE EMPLOYED DURING OPERATIONS WITHIN THE PUBLIC RIGHT-OF-WAY.
 - 12) ALL ADA ACCESSIBLE WALKWAYS CANNOT EXCEED 5% RUNNING SLOPE AND 2% CROSS SLOPE. RAMPS CANNOT EXCEED 8.33% RUNNING SLOPE AND 2% CROSS SLOPE. AND HC PARKING STALLS AND ACCESS AISLES CANNOT EXCEED 2% SLOPE IN ANY DIRECTION. PRIOR TO CONSTRUCTION, CONTRACTOR SHALL NOTIFY ENGINEER OF ANY DISCREPANCIES.
 - 13) SEE UTILITY PLAN FOR DETAILED UTILITY LAYOUT.
 - 14) CONTRACTOR IS TO FIELD ADJUST GRADES FOR THE TANK PAD TO SHED WATER.
 - 15) ALL PROPOSED CATCH BASINS SHALL HAVE 4' SLUMPS AND OUTLETS EQUIPPED WITH "ELIMINATOR" OR HOODS OR APPROVED EQUAL.
 - 16) ALL PIPE DATA IS CALCULATED TO CENTER OF STRUCTURE, TYP.
 - 17) CONTRACTOR TO REFER TO THE OPERATION & MAINTENANCE (OM&M) MANUAL FOR STORMWATER MANAGEMENT SYSTEMS & SITE MAINTENANCE DURING AND AFTER CONSTRUCTION.
 - 18) CONTRACTOR TO INCORPORATE RECOMMENDATIONS MADE IN THE GEOTECHNICAL ENGINEERING EVALUATION AS PREPARED BY AJC GROUP SERVICES LLC (AJC), DATED MARCH 5, 2019.
 - 19) CONTRACTOR TO INSTALL RISER STRUCTURES AT EACH CORNER OF UNDERGROUND DETENTION SYSTEM AND CLEANOUTS AT EACH END OF EACH ROW TO PROVIDE ACCESS POINTS FOR CLEANING AND MAINTENANCE.
 - TOTAL RISERS PROPOSED = 4
 - TOTAL CLEANOUTS PROPOSED = 4



OWNER OF RECORD:
 PARCEL ID: H-143
 ALLA MAAK PROPERTIES, LLC
 452 AMHERST STREET
 NASHUA, NEW HAMPSHIRE 03084-1228
 BOOK 5871 PAGE 652



| REVISIONS | | | | 50,345 SQUARE FEET |
|-----------|---------|----------|-----------------|--------------------|
| NO. | DATE | REV. BY. | DESCRIPTION | 1.156 ACRES |
| 1 | 7/27/20 | CMT | MISC. REVISIONS | V# |
| | | | | Store# |
| | | | | Gas Station# |

GPI Engineering Design Planning Construction Management
 405 300.0730 GIPNEL004
 Greenman-Pedersen, Inc.
 44 Stiles Road
 Suite One
 Salem, NH 03079

452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064

SCALE: 1"=20'
 DATE: 1/30/20
 FILE: 4478SP.dwg
 DRAWN BY: CPS
 CHECKED BY: CMT

Cumberland FARMS
 CUMBERLAND FARMS INC.
 185 FLANDERS ROAD
 WESTBOROUGH, MA 01581

GRADING & DRAINAGE PLAN CFG05.0

WINTER STABILIZATION NOTES:

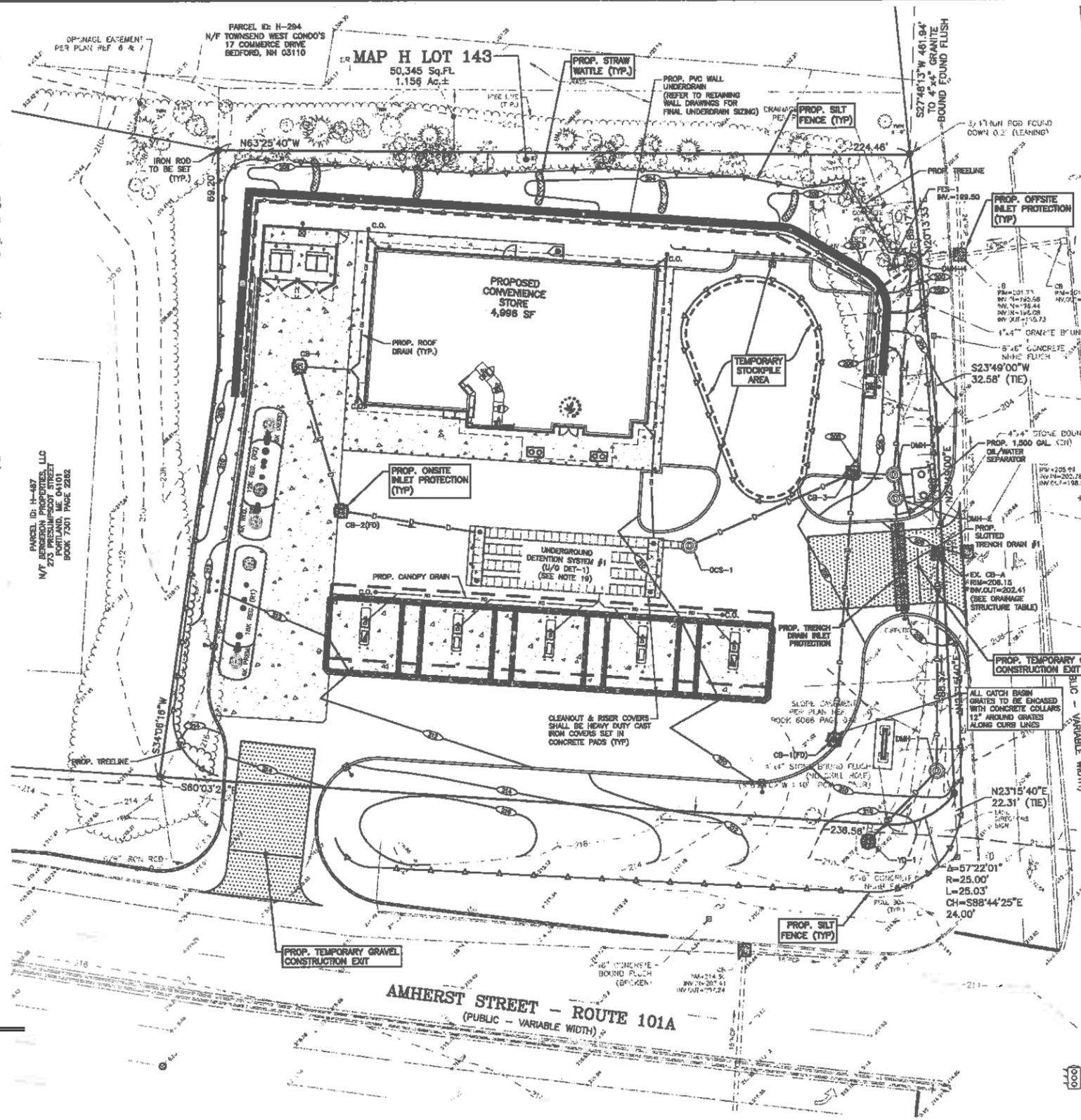
- MAINTENANCE REQUIREMENTS:**
 MAINTENANCE MEASURES SHOULD CONTINUE AS NEEDED THROUGHOUT CONSTRUCTION, INCLUDING THE OVER-WINTER PERIOD. AFTER EACH RAINFALL, SNOWFALL, OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHOULD CONDUCT AN INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUING FUNCTION.
 FOR ANY AREA STABILIZED BY TEMPORARY OR PERMANENT SEEDING PRIOR TO THE ONSET OF THE WINTER SEASON, THE CONTRACTOR SHOULD CONDUCT AN INSPECTION IN THE SPRING TO ASCERTAIN THE CONDITION OF VEGETATION COVER, AND REPAIR ANY DAMAGED AREAS OR BARE SPOTS AND RESEED AS REQUIRED TO ACHIEVE AN ESTABLISHED VEGETATIVE COVER AT LEAST 85% OF AREA VEGETATED WITH HEALTHY, MOODIOUS GROWTH, SPECIFICATIONS:
 TO ADEQUATELY PROTECT WATER QUALITY DURING COLD WEATHER AND DURING SPRING RUNOFF, THE FOLLOWING STABILIZATION TECHNIQUES SHOULD BE EMPLOYED DURING THE PERIOD FROM OCTOBER 15TH THROUGH MAY 15TH.
1. THE AREA OF EXPOSED, UNSTABILIZED SOIL SHOULD BE LIMITED TO ONE ACRE AND SHOULD BE PROTECTED AGAINST EROSION BY THE METHODS DESCRIBED IN THIS SECTION PRIOR TO ANY THAW OR SPRING MELT EVENT. SUBJECT TO APPLICABLE REGULATIONS, THE ALLOWABLE AREA OF EXPOSED SOIL MAY BE INCREASED IF ACTIVITIES ARE CONDUCTED ACCORDING TO A WINTER CONSTRUCTION PLAN, DEVELOPED BY A PROFESSIONAL ENGINEER LICENSED TO PRACTICE IN THE STATE OF NEW HAMPSHIRE OR A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL AS CERTIFIED BY THE CSPSC COUNCIL OF ENVIRONMENTAL INTERNATIONAL, INC.
 2. STABILIZATION AS FOLLOWS SHOULD BE COMPLETED WITHIN A DAY OF ESTABLISHING THE GRADE THAT IS FINAL OR THAT OTHERWISE WILL EXIST FOR MORE THAN 6 DAYS:
 A. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF LESS THAN 1:3 WHICH DO NOT EXHIBIT A MINIMUM OF 60% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHOULD BE SEEDED AND COVERED WITH 3 TO 4 TONS OF HAY OR STRAW MULCH PER ACRE SECURED WITH ANCHORED NETTING, OR 2 INCHES OF EROSION CONTROL MIX (SEE DESCRIPTION OF EROSION CONTROL MIX REQUIS FOR MATERIAL SPECIFICATION).
 B. ALL PROPOSED VEGETATED AREAS HAVING A SLOPE OF GREATER THAN 1:3 WHICH DO NOT EXHIBIT A MINIMUM OF 60% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHOULD BE SEEDED AND COVERED WITH A PROPERLY INSTALLED AND ANCHORED EROSION CONTROL BLANKET OR WITH A MINIMUM 4 INCH THICKNESS OF EROSION CONTROL MIX, UNLESS OTHERWISE SPECIFIED BY THE MANUFACTURER. NOTE THAT COMPOST BLANKETS SHOULD NOT EXCEED 2 INCHES IN THICKNESS OR THEY MAY OVERHEAT.
 3. ALL STONE-COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY OCTOBER 15.
 4. INSTALLATION OF ANCHORED HAY MULCH OR EROSION CONTROL MIX SHOULD NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH.
 5. ALL MULCH APPLIED DURING WINTER SHOULD BE ANCHORED (E.G., BY NETTING, TRACKING, WOOD CELLULOSE FIBER).
 6. STOCKPILES OF SOIL MATERIALS SHOULD BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A FOUR-INCH LAYER OF EROSION CONTROL MIX. MULCHING SHOULD BE DONE WITHIN 24 HOURS OF STOCKPILING, AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. NO SOIL STOCKPILE SHOULD BE PLACED (EVEN COVERED WITH MULCH) WITHIN 100 FEET FROM ANY WETLAND OR OTHER WATER RESOURCE AREA.
 7. FROZEN MATERIALS, (E.G., FROST LAYER THAT IS REMOVED DURING WINTER CONSTRUCTION), SHOULD BE STOCKPILED SEPARATELY AND AS FAR FROM ANY AREA NEEDING TO BE PROTECTED AS POSSIBLE. STOCKPILES OF FROZEN MATERIAL CAN MELT IN THE SPRING AND BECOME UNWORKABLE AND DIFFICULT TO TRANSPORT DUE TO THE HIGH MOISTURE CONTENT IN THE SOIL.
 8. INSTALLATION OF EROSION CONTROL BLANKETS SHOULD NOT OCCUR OVER SNOW OF GREATER THAN ONE INCH IN DEPTH OR ON FROZEN GROUND.
 9. ALL GRASS-LINED DITCHES AND CHANNELS SHOULD BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHOULD BE PROTECTED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS, AS DETERMINED BY A QUALIFIED PROFESSIONAL ENGINEER OR A CERTIFIED PROFESSIONAL IN EROSION AND SEDIMENT CONTROL AS CERTIFIED BY THE CSPSC COUNCIL OF ENVIRONMENTAL INTERNATIONAL, INC. IF A STONE LINING IS NECESSARY, THE CONTRACTOR MAY NEED TO RE-GRADE THE DITCH AS REQUIRED TO PROVIDE ADEQUATE CROSS-SECTION AFTER ALLOWING FOR PLACEMENT OF THE STONE.
 10. ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY OCTOBER 15.
 11. AFTER NOVEMBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER ACRE PER ITEM 204.3.
 12. SEDIMENT BARRIERS THAT ARE INSTALLED DURING FROZEN CONDITIONS SHOULD CONSIST OF EROSION CONTROL MIX BERM, OR CONTINUOUS CONTAINED BERMS. SALT FENCES AND HAY BALES SHOULD NOT BE INSTALLED WHEN FROZEN CONDITIONS PREVENT PROPER EMBANKMENT OF THESE BARRIERS.

CONSTRUCTION SEQUENCE NOTES:

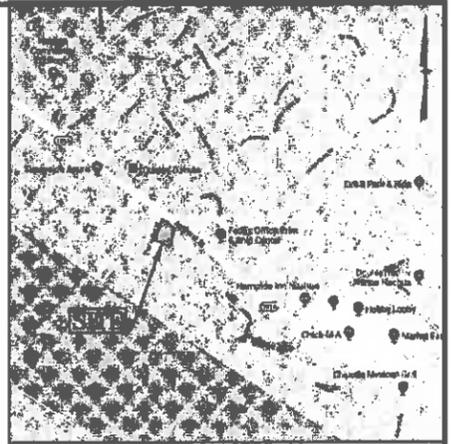
1. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY ON-SITE CONSTRUCTION AS SHOWN. ADDITIONAL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSTALLED AS SOON AS PRACTICAL.
 2. CONSTRUCT TEMPORARY STABILIZED CONSTRUCTION ENTRANCE AS SHOWN ON THIS SHEET.
 3. CUT AND STUMP AREAS OF PROPOSED CONSTRUCTION.
 4. REMOVE AND STOCKPILE TOPSOIL. STOCKPILE SHALL BE SEED TO PREVENT EROSION.
 5. CONSTRUCT PONDS, SWALES & LEVEL SPREADERS & STABILIZE PRIOR TO DIRECTING ANY RUNOFF TO THEM.
 6. CONSTRUCT ROADWAYS AND PERFORM SITE GRADING, PLACING HAY BALES AND SILTATION FENCES AS REQUIRED TO CONTROL SOIL EROSION. STABILIZE ROADS, PARKING LOTS AND CUT/FILL SLOPES WITHIN 72-HOURS OF ACHIEVING FINISH GRADES.
 7. CONSTRUCT RELOCATED DRAINAGE LINE PRIOR TO REMOVING THE EXISTING DRAINAGE LINE AS SHOWN ON DEMONSTRATION PLAN AND CORRECT RELOCATED DRAINAGE LINE.
 8. INSTALL UNDERGROUND UTILITIES AND DRAINAGE SYSTEM.
 9. BEGIN TEMPORARY AND PERMANENT SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEED OR MULCHED WITHIN 72-HOURS OF ACHIEVING FINISHED GRADINGS.
 10. DAILY, OR AS REQUIRED, CONSTRUCT, INSPECT, AND IF NECESSARY, RECONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, SILT FENCES AND SEDIMENT TRAPS INCLUDING MULCHING AND SEEDING. AT A MINIMUM, INSPECT EROSION CONTROLS WEEKLY AND AFTER EVERY 1/2" OF RAINFALL.
 11. BEGIN EXCAVATION FOR CONSTRUCTION OF BUILDINGS.
 12. FINISH PAVING ALL ROADWAYS AND DRIVEWAYS.
 13. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
 14. AFTER GRASS HAS BEEN FULLY GERMINATED IN ALL SEEDING AREAS, REMOVE ALL TEMPORARY EROSION CONTROL MEASURES.
 15. APPLICATION OF GRASS SEED, FERTILIZERS AND MULCH SHALL BE ACCOMPLISHED BY BROADCAST SEEDING OR HYDROSEEDING AT THE RATES OUTLINED BELOW:
- | | |
|--|------------------|
| Location: 138 sq./1,000 square feet. | |
| Seed Rate: 13.8 lb./1,000 sq. ft. | |
| Mulch: straw mulch approximately 3 tons/acre unless erosion control matting is used. | |
| Permanence Seed Mix | lbs./acre |
| Draining Red Fescue | 20 |
| Tall Fescue | 2 |
| Rudolp | TOTAL 42 |
| Temporary Seed Mix | lbs./acre |
| Winter Rye (Aug. 15-Sept. 15) | 112 |
| Oats (No later than May 15) | 80 |
16. NEWLY GRADED AREAS REQUIRING SLOPE PROTECTION OUTSIDE OF NORMAL SEEDING SEASON SHALL RECEIVE HAY MULCH AT THE APPROXIMATE RATE OF NO MORE THAN 2 TONS PER ACRE.
 17. THE CONTRACTOR AND DEVELOPER MUST MANAGE THE PROJECT TO MEET THE REQUIREMENTS AND INTENT OF RSA 430:53 AND AGR 3800 RELATIVE TO WATERSHED SPACES.
 18. FUGITIVE DUST MUST BE CONTROLLED IN ACCORDANCE WITH EN-A-1000.

LEGEND

| | | | |
|-----------|--------------------------|-----------------------|-------------------|
| — VGC — | VERTICAL GRANITE CURB | — SIGN — | SIGN |
| — CCB — | CAPE COD BERM | — SPOT ELEVATION — | SPOT ELEVATION |
| — DSLY — | DOUBLE SOLID LINE YELLOW | — DRAIN MANHOLE — | DRAIN MANHOLE |
| — SSW — | SINGLE SOLID LINE WHITE | — CATCH BASIN — | CATCH BASIN |
| — G — | GAS LINE | — VENT — | VENT |
| — T — | UNDERGROUND TELEPHONE | — SEWER MANHOLE — | SEWER MANHOLE |
| — W — | WATER LINE | — TELEPHONE MANHOLE — | TELEPHONE MANHOLE |
| — E — | UNDERGROUND ELECTRIC | — MANHOLE — | MANHOLE |
| — P & R — | POST & RAIL FENCE | — GAS VALVE — | GAS VALVE |
| — G — | GUARDRAIL | — GAS SHUT OFF — | GAS SHUT OFF |
| — 9 — | CONTOUR ELEVATION | — WATER VALVE — | WATER VALVE |
| — T — | TREE | — WATER SHUT OFF — | WATER SHUT OFF |
| — U — | UTILITY POLE | — FIRE HYDRANT — | FIRE HYDRANT |
| — GUY — | GUY WIRE | — BOLLARD — | BOLLARD |
| — OW — | OVERHEAD WIRE | — GAS METER — | GAS METER |
| — TR — | TREELINE | — ELECTRIC METER — | ELECTRIC METER |
| — PB — | PULL BOX | — LIGHT POLE — | LIGHT POLE |



PARCEL ID: H-403
 N/F VAND A & GORRIS
 462 AMHERST STREET
 NASHUA, NH 03078
 BOOK 5872 PAGE 1734



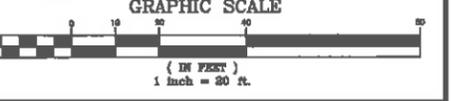
LOCATION MAP (NOT TO SCALE)

EROSION CONTROL NOTES:

1. THE EROSION CONTROL PROCEDURES SHALL CONFORM TO THE NH STATEWORKER MANUAL, VOLUME 3, EROSION & SEDIMENT CONTROLS DURING CONSTRUCTION, DECEMBER 2006.
2. DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME AS APPROVED BY THE ENGINEER. LAND SHOULD NOT BE LEFT EXPOSED DURING THE WINTER MONTHS.
3. LIMIT OF MAXIMUM AREA OF EXPOSED SOIL AT ANY ONE TIME TO LESS THAN 5 ACRES. THE EXPOSED AREA THAT IS BEING ACTIVELY WORKED DURING THE WINTER IS TO BE LESS THAN 3 ACRES DURING THE WINTER SEASON.
4. ALL PERMANENT STORM WATER STRUCTURES SHALL BE STABILIZED PRIOR TO DIRECTING FLOW INTO THEM. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 A) BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
 B) A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH HAS BEEN ESTABLISHED.
 C) A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR ROCK-PAP HAS BEEN INSTALLED.
 D) OR, EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
5. SILT FENCE SHALL BE INSTALLED AND MAINTAINED DURING AND AFTER DEVELOPMENT TO REMOVE SEDIMENT FROM RUNOFF WATER AND FROM LAND UNDERGOING DEVELOPMENT. WHERE POSSIBLE, NATURAL DRAINAGEWAYS SHOULD BE UTILIZED AND LEFT OPEN TO REMOVE EXCESS SURFACE WATER. SILT FENCE TO BE MAINTAINED AND CLEANED UNTIL ALL SLOPES HAVE A HEALTHY STAND OF GRASS.
6. ALL DISTURBED AREAS AND SLOPES WHICH ARE FINISHED GRADING, WITH NO FURTHER CONSTRUCTION TO TAKE PLACE, SHALL BE LOANED AND SEED WITHIN 72 HOURS AFTER FINAL GRADING. A MINIMUM OF 4" OF LOAM SHALL BE INSTALLED WITH NOT LESS THAN ONE POUND OF SEED PER 50 SQUARE YARDS OF AREA. THE SEED MIX SHALL BE AS DESIGNATED BELOW.
7. ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REENTERED LATER DURING CONSTRUCTION SHALL BE MACHINE HAY MULCHED AND SEED WITH THE GRASS TO PREVENT EROSION. THE MAXIMUM LENGTH OF TIME FOR THE EXPOSURE OF DISTURBED SOILS SHALL BE 45 DAYS. HAY OR STRAW MULCH SHALL BE APPLIED TO ALL FRESHLY SEEDING AREAS AT THE RATE OF 2 TONS PER ACRE. BALES SHALL BE UNSPOOLED, AIR DRIED, AND FREE FROM WEEDS, SEEDS AND ANY COMPOST MATERIAL.
8. DURING GRADING OPERATIONS INSTALL HAY BALE BARRIERS ALONG TOE OF SLOPE OF FILL AREAS WHERE SHOWN. BARRIERS ARE TO BE MAINTAINED UNTIL DISTURBED AREAS ARE PAVED OR GRASSED.
9. THE FILL MATERIAL SHALL BE OF APPROVED SOIL TYPE FREE FROM STUMPS, ROOTS, WOOD, ETC. TO BE PLACED IN 12" LIFTS OR AS SPECIFIED. BULLDOZERS, TRUCKS, TRACTORS OR ROLLERS MAY BE USED FOR COMPACTION BY ROUTING THE EQUIPMENT TO ALL AREAS ON EACH LAYER.
10. AVOID THE USE OF FUTURE OPEN SPACES (LOW & SEED) WHEREVER POSSIBLE DURING CONSTRUCTION. CONSTRUCTION TRUCKS SHALL USE THE ROADSIDE OF FUTURE ROADS.

TEMPORARY EROSION CONTROL MEASURES:

1. THE SMALLEST PRACTICAL AREA OF LAND SHALL BE EXPOSED AT ANY ONE TIME. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
2. HAY BALE BARRIERS AND SEDIMENT TRAPS SHALL BE INSTALLED AS REQUIRED. BARRIERS AND TRAPS ARE TO BE MAINTAINED AND CLEANED UNTIL ALL SLOPES HAVE A HEALTHY STAND OF GRASS.
3. BAILED HAY AND MULCH SHALL BE BORNES OF ACCEPTABLE HERBACEOUS GROWTH, FREE FROM MOODIOUS WEEDS OR WOODY STEMS, AND SHALL BE DRY. NO SALT HAY SHALL BE USED.
4. FILL MATERIAL SHALL BE FREE FROM STUMPS, WOOD, ROOTS, ETC.
5. STOCKPILES MATERIALS SHALL BE PLACED ONLY IN AREAS SHOWN ON THE PLANS. STOCKPILES SHALL BE PROTECTED BY SILTATION FENCE AND SEED TO PREVENT EROSION. THESE MATERIALS SHALL REMAIN UNTIL ALL MATERIAL HAS BEEN PLACED OR DEPOSED OFF SITE.
6. ALL DISTURBED AREAS SHALL BE LOANED AND SEEDING, A MINIMUM OF 4 INCHES OF LOAM SHALL BE INSTALLED AND SEEDING AS SPECIFIED.
7. AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED.
8. PAVED ROADWAYS MUST BE KEPT CLEAN AT ALL TIMES.
9. ALL CATCH BASIN INLETS WILL BE PROTECTED WITH LOW POINT SEDIMENTATION BARRIER.
10. ALL STORM DRAINAGE OUTLETS WILL BE STABILIZED AND CLEANED AS REQUIRED, BEFORE THE DISCHARGE POINTS BECOME OPERATIONAL.
11. ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTER AREA.
12. SITE MATING OR APPROVED EQUIVALENT SHALL BE PROVIDED ON ALL SLOPES GREATER THAN 3:1.



OWNER OF RECORD:
 PARCEL ID: H-143
 ALMA MAK PROPERTIES, LLC
 462 AMHERST STREET
 NASHUA, NEW HAMPSHIRE 03064-1228
 BOOK 5871 PAGE 662



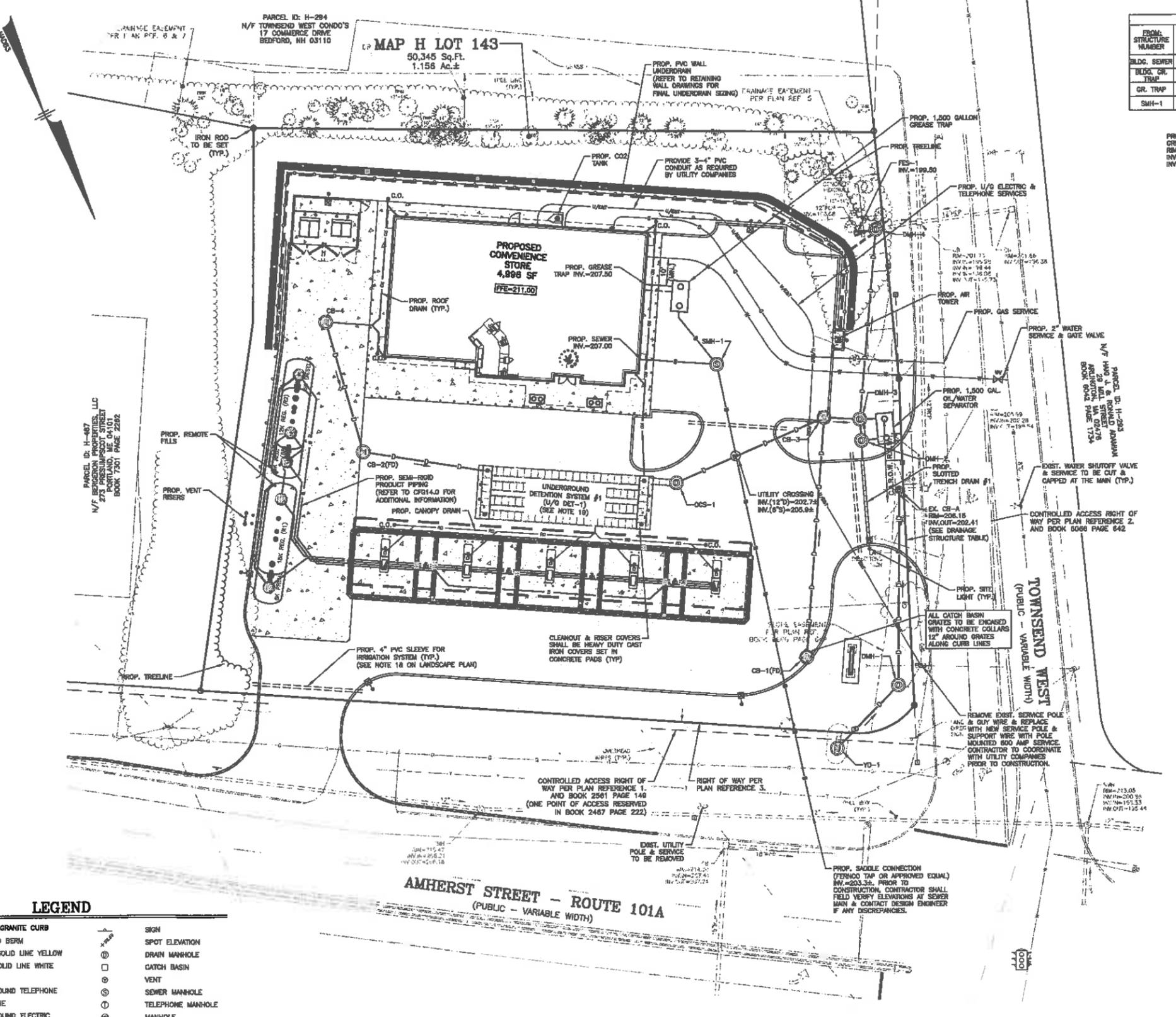
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|-----------|---------|---------|-----------------|--------------------|
| NO. | DATE | REV. BY | DESCRIPTION | 1.156 ACRES |
| 1 | 7/27/20 | CMT | MISC. REVISIONS | V# |
| | | | | Gas Station# |

GPI Engineering Design Planning Construction Management
 603.893.0720 GPI.NET.COM
 Greenman-Pedersen, Inc.
 44 Stiles Road
 Suite One
 Salem, NH 03079

452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064
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 CHECKED BY: CMT

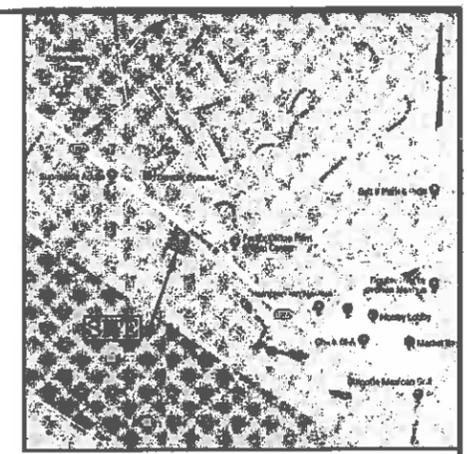
Cumberland FARMS
 165 FLANDERS ROAD
 WESTBOROUGH, MA 01581

EROSION & SEDIMENTATION CONTROL PLAN CFG06.0



| FROM STRUCTURE NUMBER | PIPE SIZE (inches) | TYPE OF PIPE | APPROX. PIPE LENGTH (feet) | SLOPE OF PIPE (ft./ft.) | TO STRUCTURE NUMBER |
|-----------------------|--------------------|--------------|----------------------------|-------------------------|---------------------|
| BLDG. SEWER | 4 | PVC | 28 | 0.032 | SMH-1 |
| BLDG. CR. TRAP | 4 | PVC | 10 | 0.020 | GR. TRAP |
| GR. TRAP | 4 | PVC | 22 | 0.020 | SMH-1 |
| SMH-1 | 6 | PVC | 167 | 0.019 | EXIST. MAIN |

| SEWER STRUCTURES | |
|-----------------------------------|-----------------|
| PROPOSED 1,500 GALLON GREASE TRAP | PROP. SMH-1 |
| RM=210.00 | RM=210.00 |
| INV. IN=207.50 | INV. IN=205.80 |
| INV. OUT=207.05 | INV. OUT=206.50 |

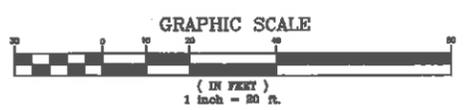


LOCATION MAP
(NOT TO SCALE)

- NOTES:**
- ALL SANITARY SEWER PIPE SHALL BE PVC (SDR-35), UNLESS OTHERWISE NOTED.
 - ALL WATER PIPE SHALL BE COPPER (TYPE K), UNLESS OTHERWISE NOTED.
 - ELEVATIONS ARE BASED ON NAVD83 DATUM.
 - ANY UTILITY FIELD ADJUSTMENTS SHALL BE APPROVED BY THE ENGINEER OF RECORD AND COORDINATED WITH THE APPROPRIATE LOCAL UTILITY COMPANY.
 - THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE ONLY. THE CONTRACTOR IS TO VERIFY EXACT LOCATION PRIOR TO CONSTRUCTION. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES.
 - ALL CONSTRUCTION SHALL CONFORM TO MUNICIPAL DPW AND ALL APPLICABLE STATE AND FEDERAL STANDARDS.
 - THE CONTRACTOR SHALL CALL AND COORDINATE WITH DIG-SAFE (1-888-344-7233) PRIOR TO COMMENCING ANY EXCAVATION.
 - ALL WATER AND SEWER CONSTRUCTION SHALL CONFORM TO DEPARTMENT OF PUBLIC WORKS SPECIFICATIONS.
 - ALL ELECTRIC, TELEPHONE AND CABLE TV LINES ARE TO BE UNDERGROUND AND INSTALLED IN CONFORMANCE WITH APPLICABLE UTILITY CO. SPECIFICATIONS.
 - ANY UTILITIES TO BE TAKEN OUT OF SERVICE SHALL BE DISCONNECTED AS DIRECTED BY UTILITY COMPANY AND LOCAL DPW.
 - ALL TRAFFIC CONTROL AND TEMPORARY CONSTRUCTION SIGNAGE ARRANGEMENTS, ACCEPTABLE TO NHDOT AND CITY OF NASHUA DEPARTMENT OF PUBLIC WORKS, SHALL BE EMPLOYED DURING OPERATIONS WITHIN THE PUBLIC RIGHT-OF-WAY.
 - SEE GRADING & DRAINAGE PLAN FOR DETAILED DRAINAGE INFORMATION.
 - ELECTRICAL CONDUIT WITHIN 20' OF TANKS OR DISPENSERS MAY NEED TO BE RIGID METAL CONDUIT WITH CONCRETE ENCASUREMENT. CONTRACTOR TO COORDINATE WITH UTILITY COMPANY AND/OR TOWN ELECTRICAL INSPECTOR AS REQUIRED.
 - REFER TO DETAIL SHEETS FOR ALL UTILITY AND DRAINAGE STRUCTURE DETAILS AND ADDITIONAL INFORMATION.

PUBLIC UTILITIES

| UTILITIES | AVAILABLE |
|---|-----------|
| (SEWER) DIVISION OF PUBLIC WORKS WASTEWATER DEPARTMENT (603-598-3580) | YES |
| (WATER) PENNACHTUCK WATER WORKS (603-882-5181) | YES |
| (GAS) LIBERTY UTILITIES (800-833-4200) | YES |
| (ELECTRIC) EVERSOURCE (888-554-6028) | YES |
| (TELEPHONE) CONSOLIDATED COMMUNICATIONS (1-844-956-7244) | YES |



LEGEND

| | | | |
|-----|--------------------------|---|-------------------|
| VFC | VERTICAL GRANITE CURB | — | SIGN |
| COB | CAPE OOD BERM | — | SPOT ELEVATION |
| DSL | DOUBLE SOLID LINE YELLOW | — | DRAIN MANHOLE |
| SSL | SINGLE SOLID LINE WHITE | — | CATCH BASIN |
| G | GAS LINE | — | VENT |
| T | UNDERGROUND TELEPHONE | — | SEWER MANHOLE |
| W | WATER LINE | — | TELEPHONE MANHOLE |
| E | UNDERGROUND ELECTRIC | — | MANHOLE |
| P&R | POST & RAIL FENCE | — | GAS VALVE |
| G | GUARDRAIL | — | GAS SHUT OFF |
| C | CONTOUR ELEVATION | — | WATER VALVE |
| T | TREE | — | WATER SHUT OFF |
| U | UTILITY POLE | — | FIRE HYDRANT |
| G | GUY WIRE | — | BOLLARD |
| OW | OVERHEAD WIRE | — | GAS METER |
| T | TREELINE | — | ELECTRIC METER |
| PB | PULL BOX | — | LIGHT POLE |



OWNER OF RECORD:
 PARCEL ID: H-143
 ALLA MAAK PROPERTIES, LLC
 468 AMHERST STREET
 NASHUA, NEW HAMPSHIRE 03064-1228
 BOOK 5871 PAGE 652



| REVISIONS | | | | 50,345 SQUARE FEET |
|-----------|---------|----------|-----------------|--------------------|
| NO. | DATE | REV. BY: | DESCRIPTION | 1.156 ACRES |
| 1 | 7/27/20 | CMT | MISC. REVISIONS | V# |
| | | | | Gas Station# |

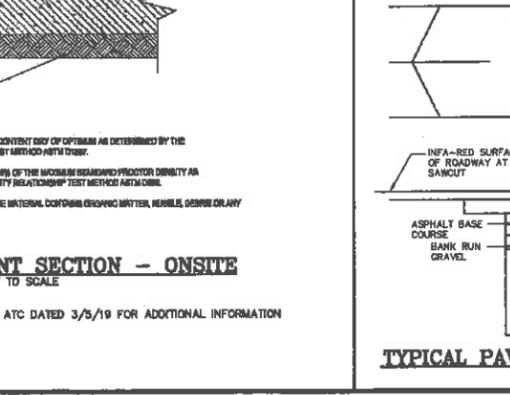
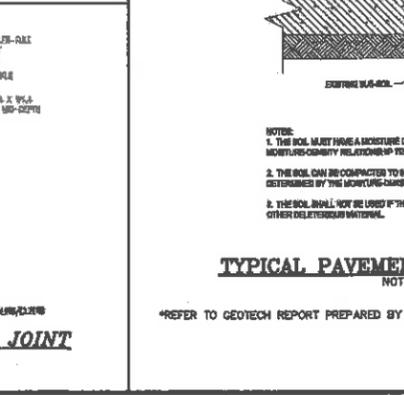
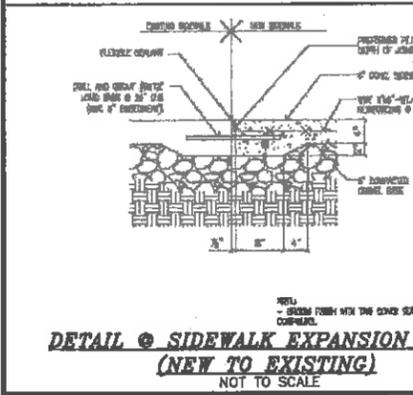
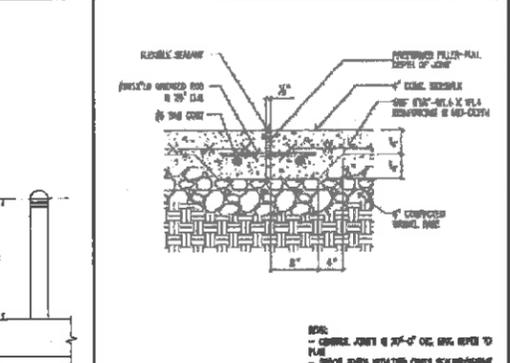
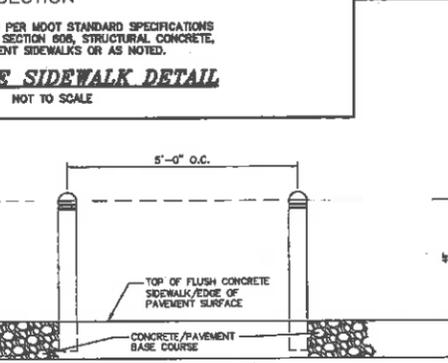
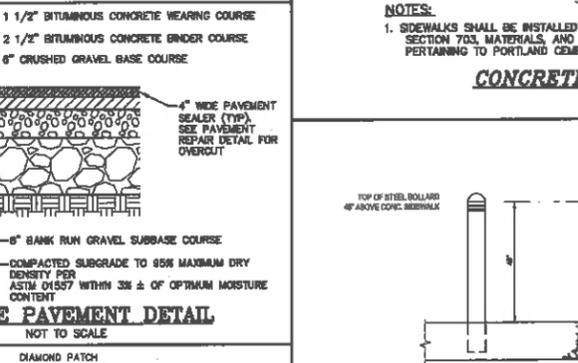
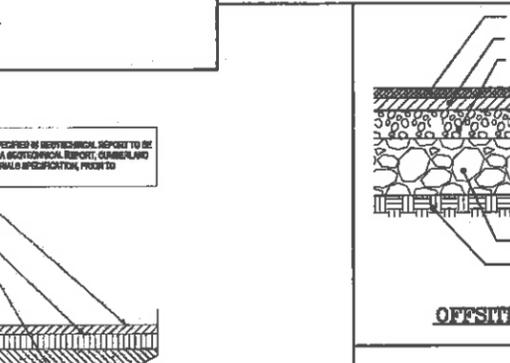
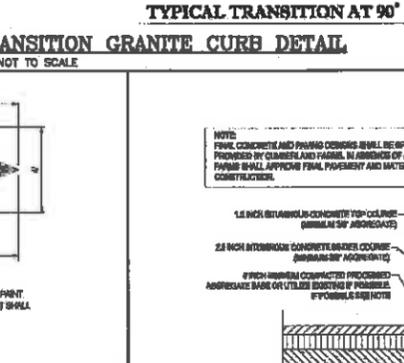
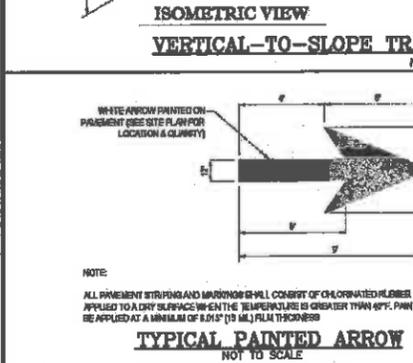
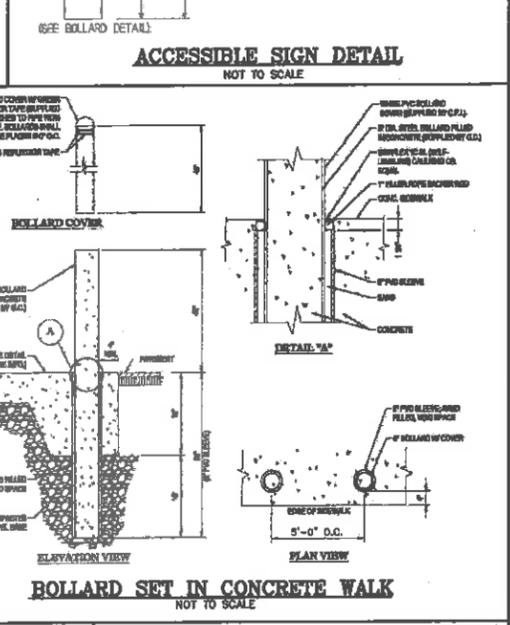
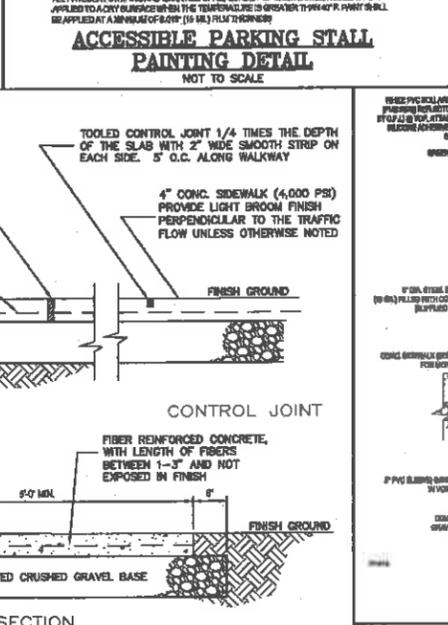
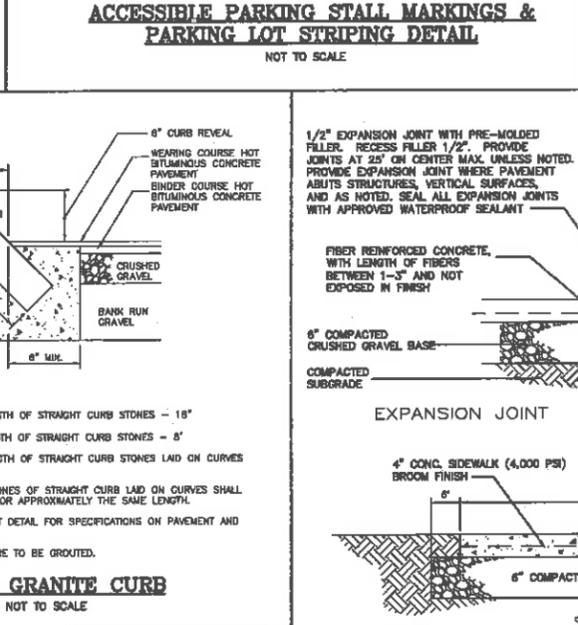
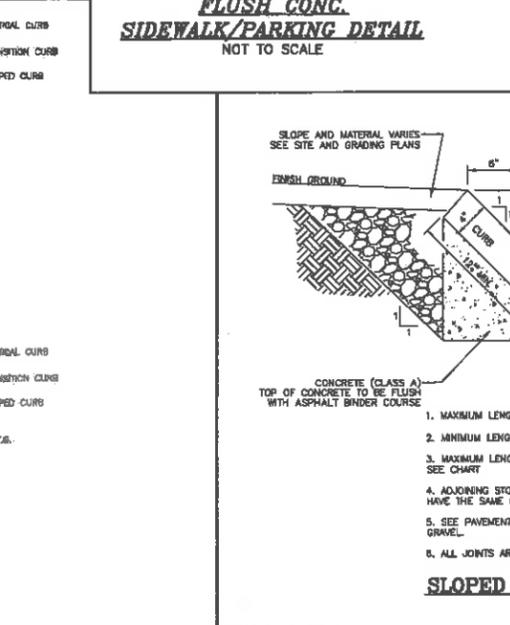
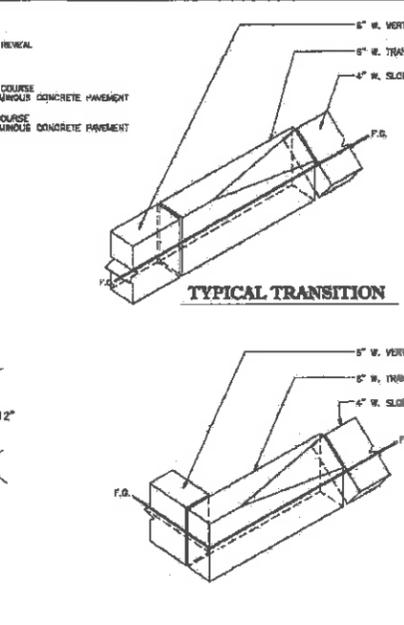
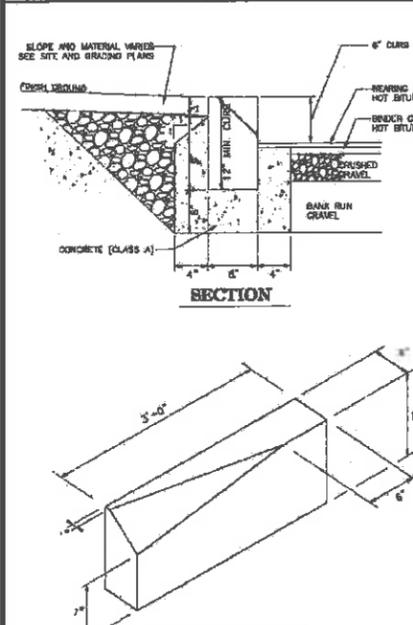
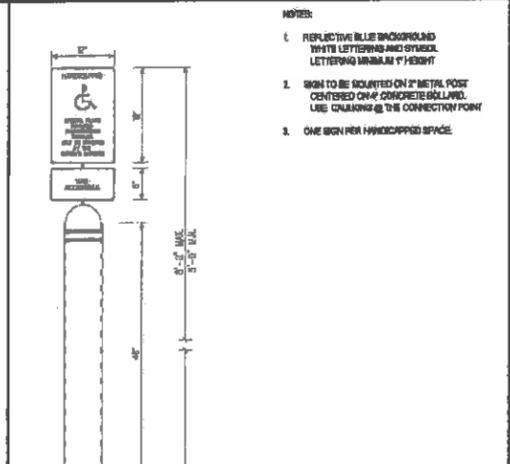
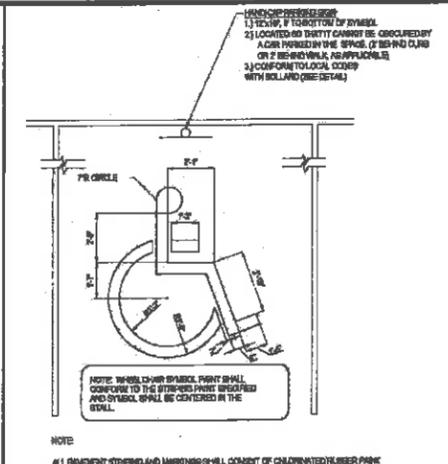
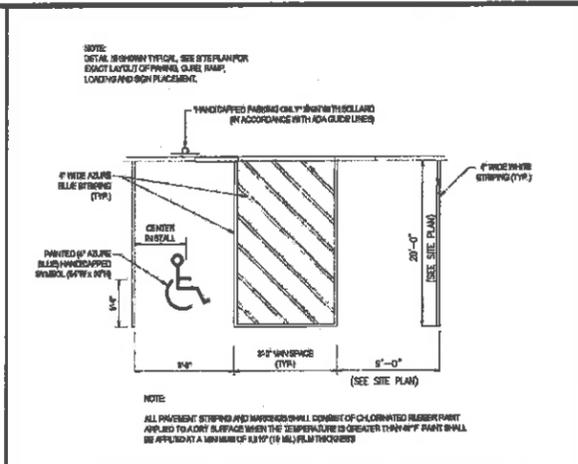
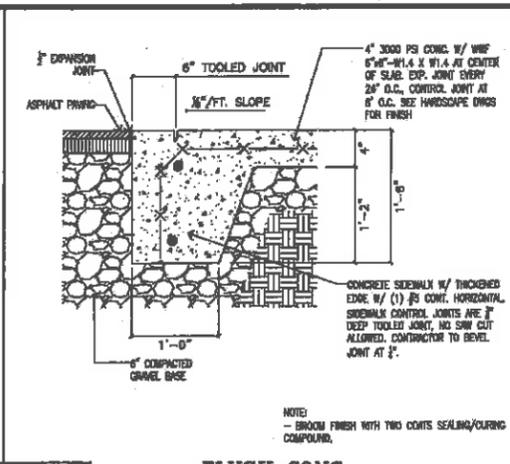
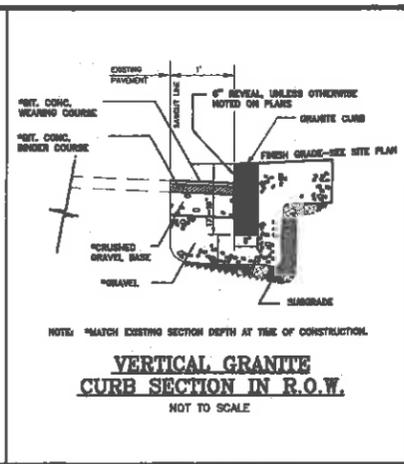
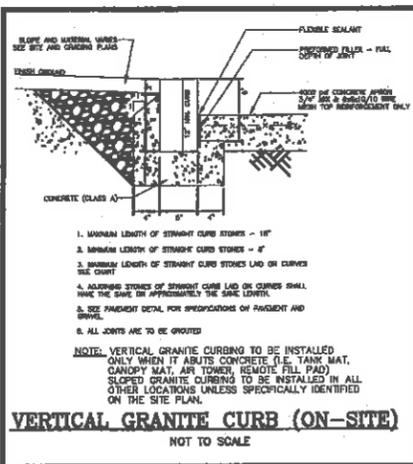
GPI Engineering Design Planning Construction Management
 003 833-0720 GPINET.COM
 Greenman-Pedersen, Inc.
 44 Stiles Road
 Suite One
 Salem, NH 03079

452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064

CUMBERLAND FARMS INC.
 165 FLANDERS ROAD
 WESTBOROUGH, MA 01581

SCALE: 1"=20'
 DATE: 1/30/20
 FILE: 4478SP.dwg
 DRAWN BY: CPS
 CHECKED BY: CMT

UTILITY PLAN CFG07.0



| REVISIONS | | | |
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| NO. | DATE | REV. BY. | DESCRIPTION |
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| |
|--------------------|
| 50,345 SQUARE FEET |
| 1.156 ACRES |
| V# |
| Store# |
| Gas Station# |

GPI Engineering Design Planning Construction Management
402 252-0720

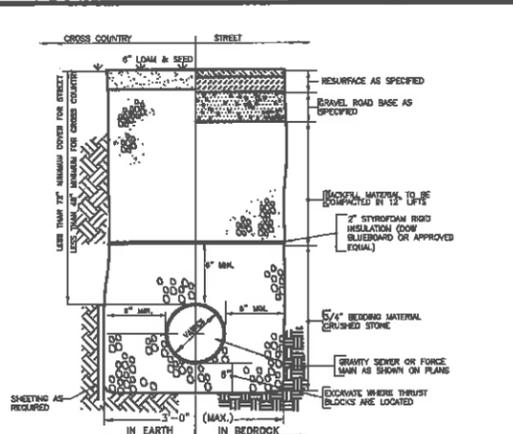
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44 Stiles Road
Suite One
Salem, NH 03079

452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064

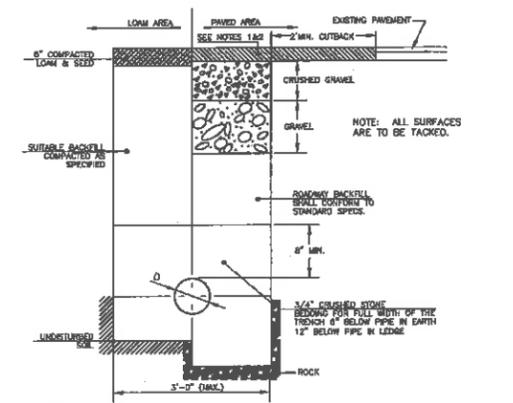
CUMBERLAND FARMS
165 FLANDERS ROAD
WESTBOROUGH, MA 01581

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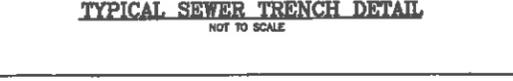
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CFG09.0



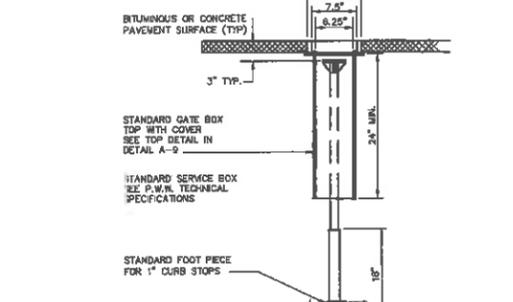
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NOT TO SCALE



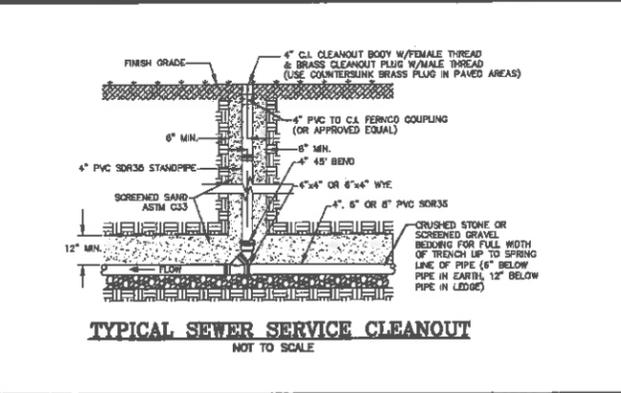
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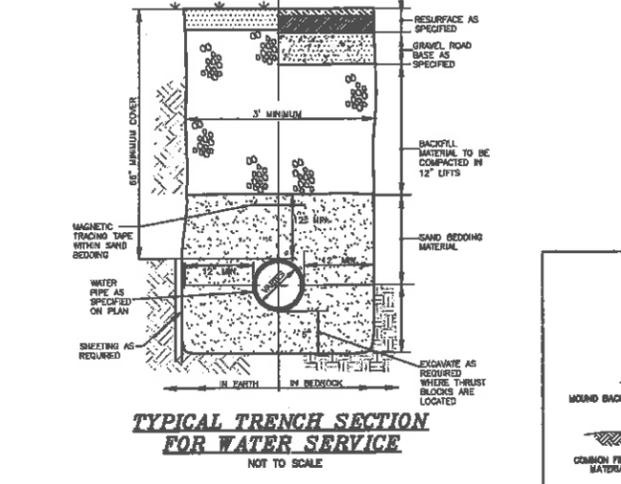
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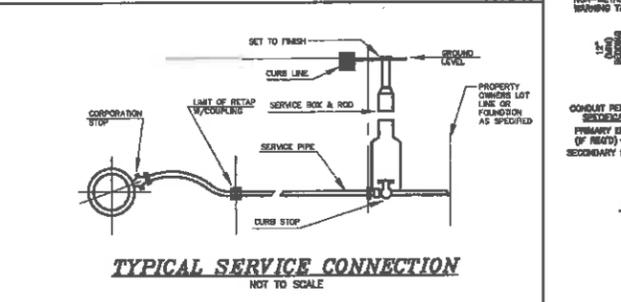
SERVICE BOX INSTALLATION IN PAVEMENT
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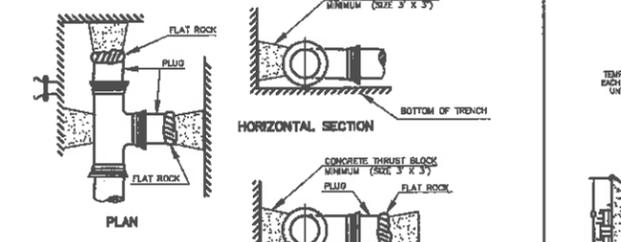
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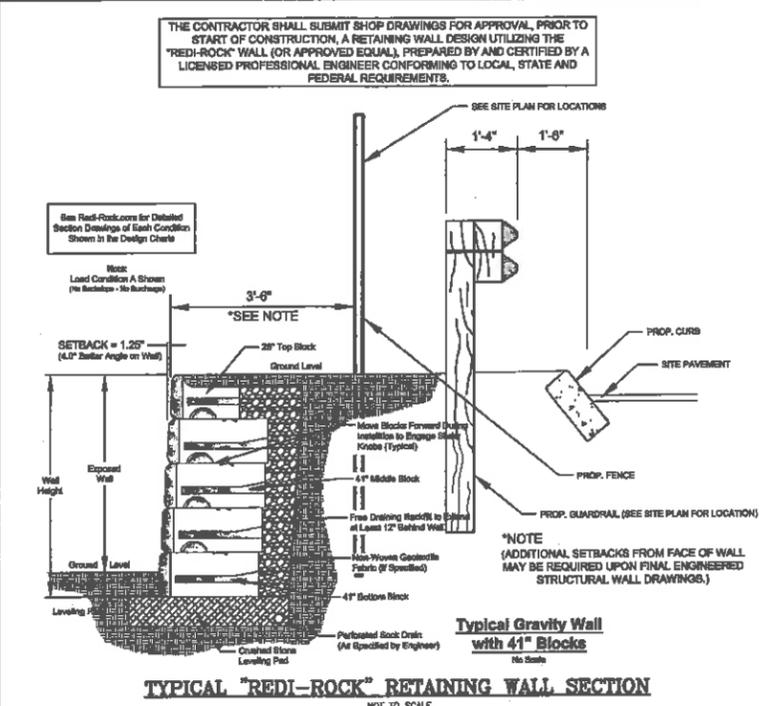
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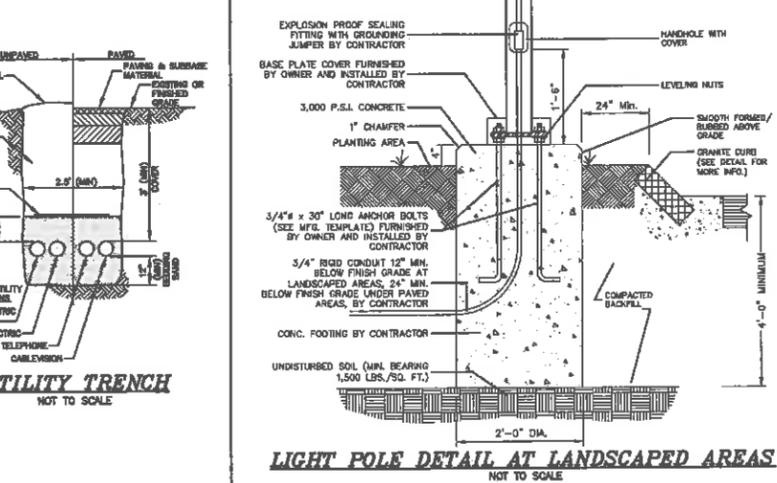
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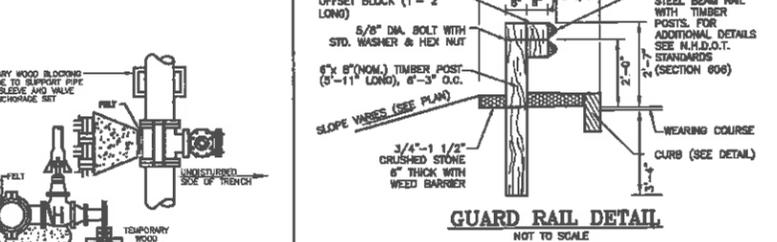
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TYPICAL GRAVITY WALL WITH 41" BLOCKS
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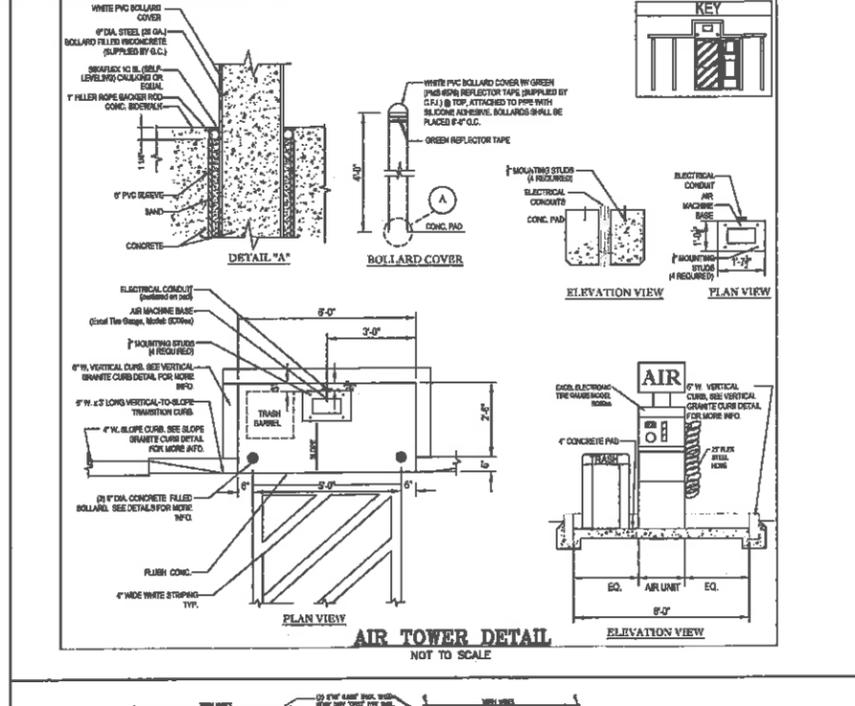
LIGHT POLE DETAIL AT LANDSCAPED AREAS
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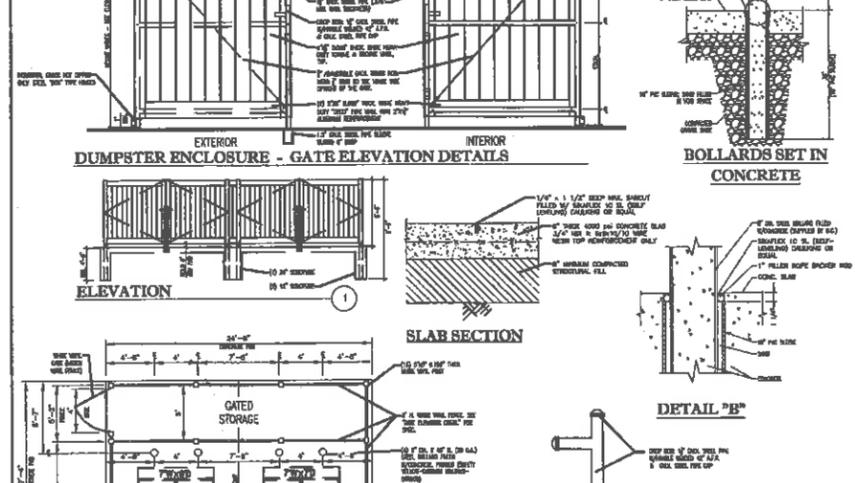
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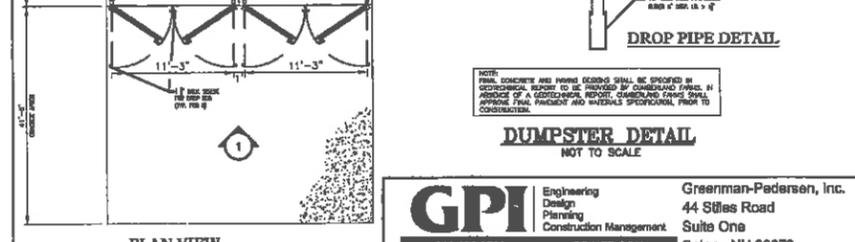
TAPPING VALVE AND SLEEVE DETAIL
NOT TO SCALE



AIR TOWER DETAIL
NOT TO SCALE



DUMPSTER ENCLOSURE - GATE ELEVATION DETAILS
NOT TO SCALE

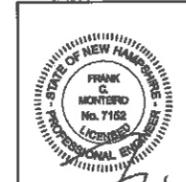


DUMPSTER DETAIL
NOT TO SCALE



DROP PIPE DETAIL
NOT TO SCALE

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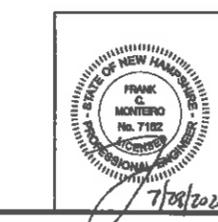
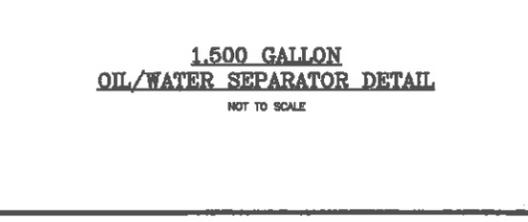
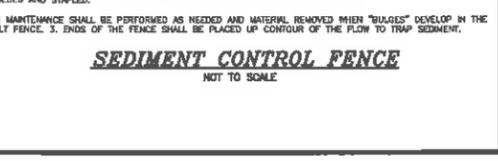
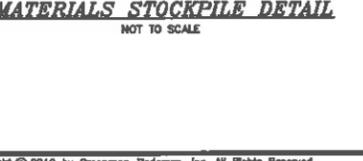
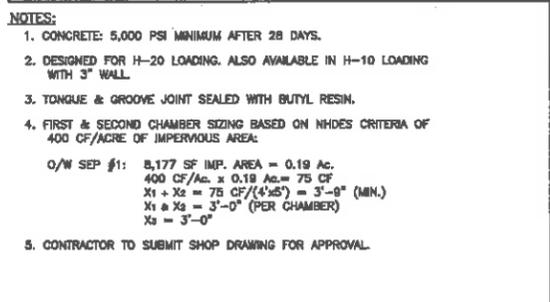
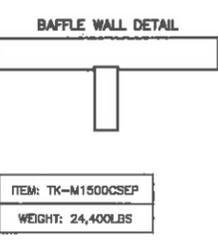
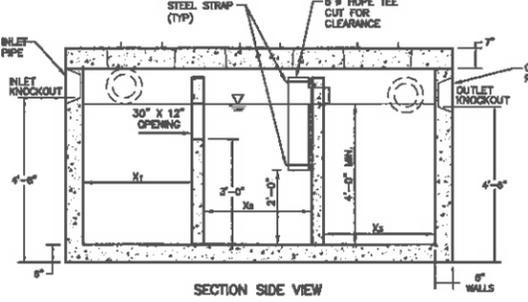
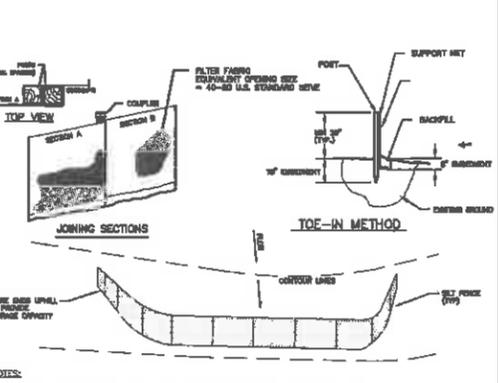
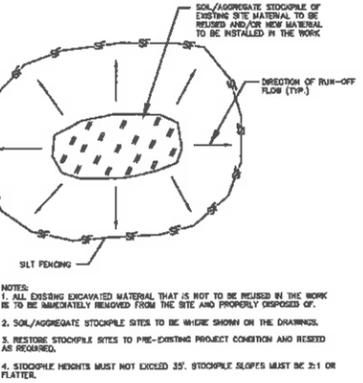
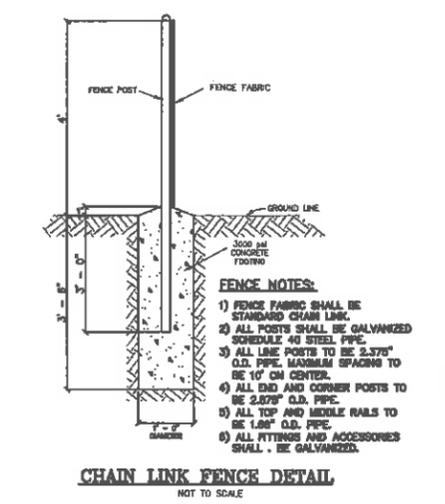
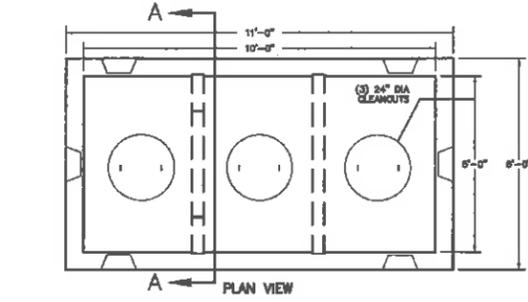
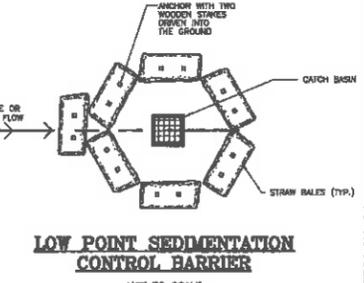
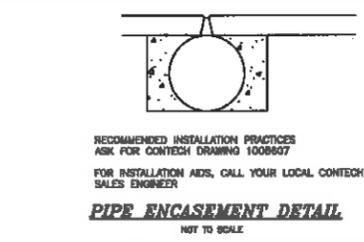
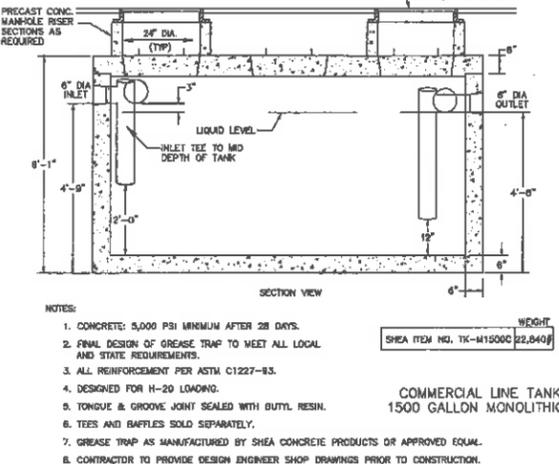
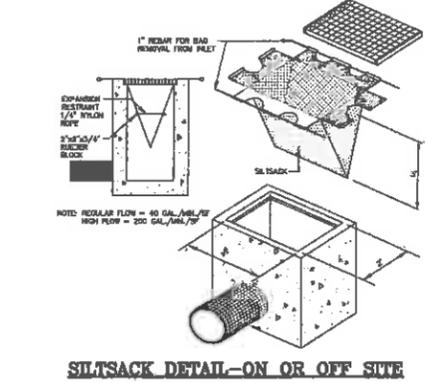
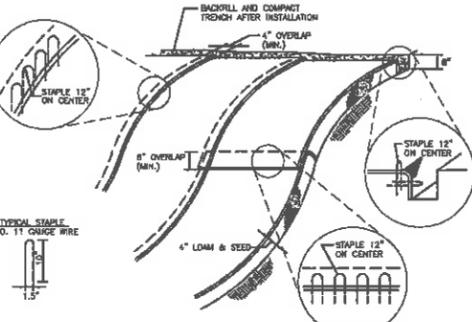
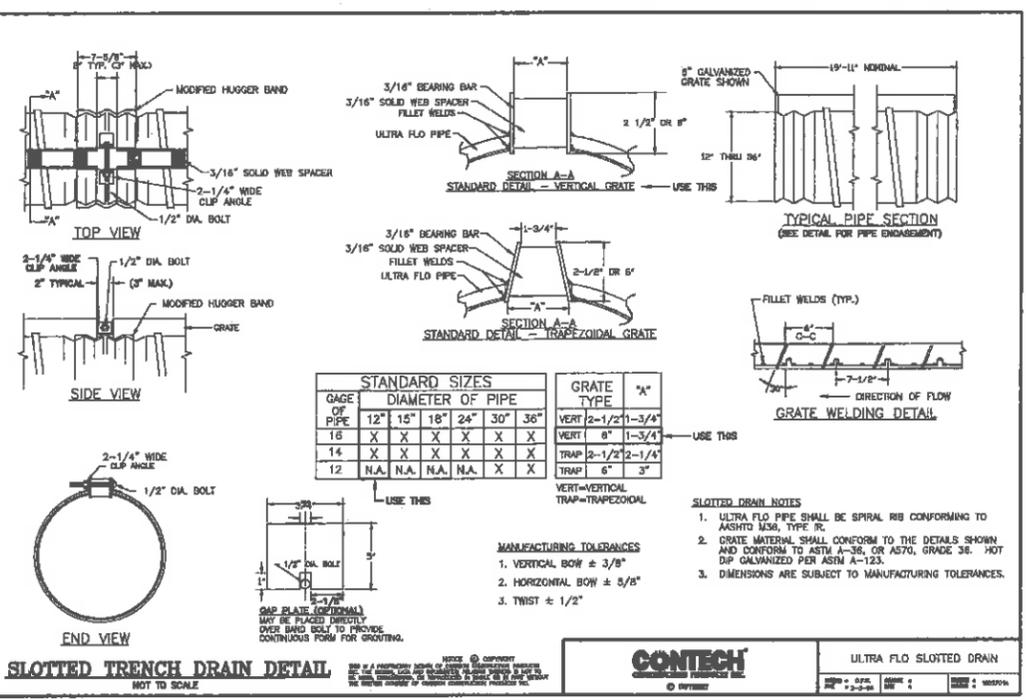
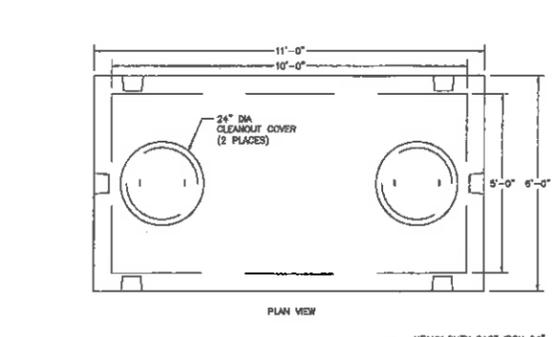
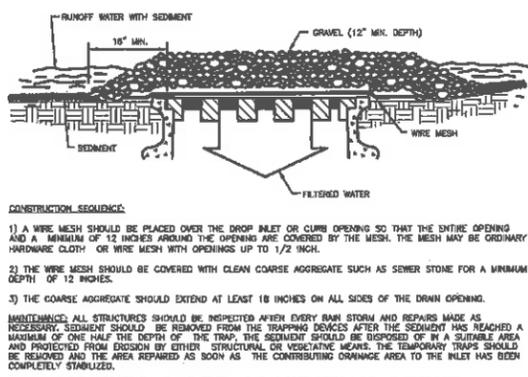
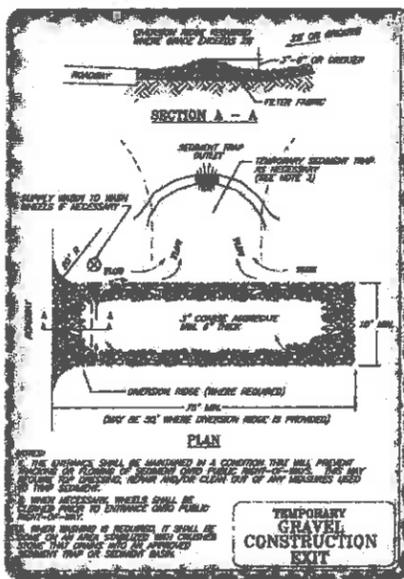


| REVISIONS | | | |
|-----------|---------|---------|-----------------|
| NO. | DATE | REV. BY | DESCRIPTION |
| 1 | 7/27/20 | CMT | MISC. REVISIONS |

GPI Engineering Design Planning Construction Management
452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064
SCALE: 1"=20'
DATE: 1/30/20
FILE: 447618.DWG
DRAWN BY: CPS
CHECKED BY: CMT

50,345 SQUARE FEET
1.156 ACRES
V#
Store#
Gas Station#

CUMBERLAND FARMS INC.
165 FLANDERS ROAD
WESTBOROUGH, MA 01581
DETAIL SHEET
CFG09.1



| REVISIONS | | | | 50,345 SQUARE FEET |
|-----------|---------|----------|-----------------|--------------------|
| NO. | DATE | REV. BY. | DESCRIPTION | 1.156 ACRES |
| 1 | 7/27/20 | CMT | MISC. REVISIONS | V# |
| | | | | Gas Station# |

GPI Engineering Design Planning Construction Management
603.893.0720 GPISET.COM

Greenman-Pedersen, Inc.
44 Stiles Road
Suite One
Salem, NH 03079

452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064

Cumberland FARMS
CUMBERLAND FARMS INC.
165 FLANDERS ROAD
WESTBOROUGH, MA 01581

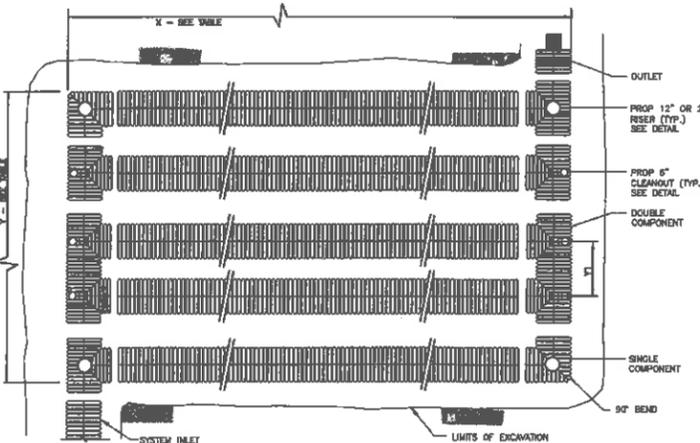
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DETENTION SYSTEM NOTES:

- 1) ALL SITE DRAINAGE PIPE SHALL BE CORRUGATED HIGH-DENSITY POLYETHYLENE PIPE, DUAL WALL, SMOOTH INTERIOR AS MANUFACTURED BY ADS, INC., OR APPROVED EQUAL, UNLESS OTHERWISE NOTED ON PLAN.
- 2) CONTRACTOR SHOULD CONFIRM SYSTEM PARTS AND OBTAIN SHOP DRAWINGS FROM MANUFACTURER. SUBSTITUTIONS AND SHOP DRAWINGS SHOULD BE APPROVED BY THE ENGINEER.
- 3) PARTS SPECIFICATIONS SHOWN ARE AS PROVIDED BY ADS, INC., OR APPROVED EQUAL. ANY CHANGES TO THESE SPECIFICATIONS SHOULD BE APPROVED BY DESIGN ENGINEER FOR PERFORMANCE.



UNDERGROUND STORMWATER DETENTION SYSTEM TABLE

| UG DETENTION SYSTEM | LENGTH (X) | WIDTH (Y) | SPACING (Y1) (O.C. TYP.) | PIPE SIZE (INCHES) SOLID | INV. PIPE ELEV. (A) | # PIPE ROWS |
|---------------------|------------|-----------|--------------------------|--------------------------|---------------------|-------------|
| DETENTION SYS-1 | 60' | 22.25' | 63" | 36" SOLID (WT) | 203.00 | 4 |

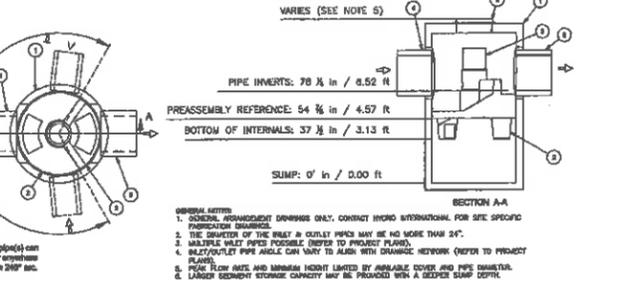
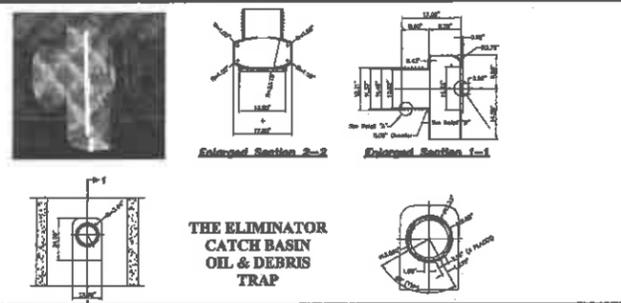
* SEE TYPICAL CROSS SECTIONS BELOW
WT = WATER TIGHT JOINTS

TYPICAL UNDERGROUND DETENTION SYSTEM LAYOUT
NOT TO SCALE

Table 5-2
Classes of Embankment and Backfill Materials

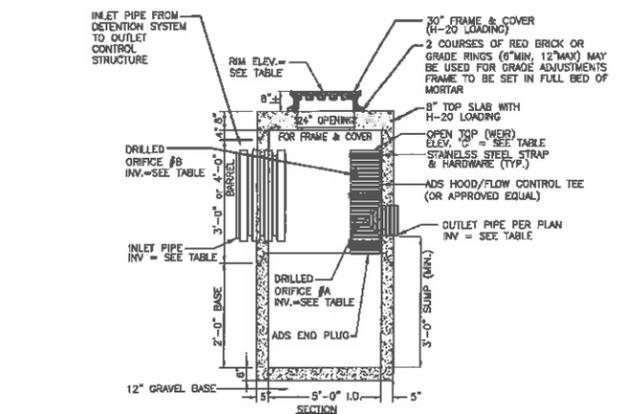
| Class | Material | ASTM Designation | Permeability (cm/sec) | Compaction (Proctor %) | Maximum Particle Size (mm) | Minimum Liquid Limit (%) | Minimum Plasticity Index (%) | Remarks |
|-------|--------------------------------------|------------------|-----------------------|------------------------|----------------------------|--------------------------|------------------------------|---------------|
| 1 | Highly erodible fill | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 2 | Highly erodible fill with 10% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 3 | Highly erodible fill with 20% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 4 | Highly erodible fill with 35% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 5 | Highly erodible fill with 50% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 6 | Highly erodible fill with 60% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 7 | Highly erodible fill with 70% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 8 | Highly erodible fill with 80% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 9 | Highly erodible fill with 90% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 10 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 11 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 12 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 13 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 14 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 15 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 16 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 17 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 18 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 19 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 20 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 21 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 22 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 23 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 24 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 25 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 26 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 27 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 28 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 29 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |
| 30 | Highly erodible fill with 100% fines | ASTM D 1557 | > 1000 | > 90 | > 100 | > 40 | > 10 | Not Permitted |

- Notes:
- 1) Refer to ASTM D2321 for more complete soil descriptions.
 - 2) Class 1A material has limited application and can be difficult to place and compact, use ONLY with the approval of the engineer. Contact ADS for additional information regarding suitability of this backfill material.
 - 3) NW indicates that use of this material and/or compactive level is not recommended by ASTM D2321 for the backfill application.
 - 4) When using open-graded material, additional protection must be taken to reduce or eliminate the risk of migration of fines from adjacent material. Refer to ASTM D2321 for more complete information.



- GENERAL NOTES:
1. INSURE PROPER DRAINAGE DIRECTION. CONTACT ENGINEER FOR SPECIFIC INFORMATION.
 2. THE DRAINAGE OF THE TRAP & OUTLET PIPE SHALL BE NO MORE THAN 24".
 3. MULTIPLE TRAPS AFTER POSSIBLE TO PROTECT PLUMBING.
 4. ALL OUTLET PIPE ANGLES CAN ONLY BE MADE WITH DRAINAGE NETWORK (REFER TO PRODUCT PLANS).
 5. FROM FLOW ARCS AND MINIMUM HEIGHT LIMITED BY AVAILABLE COVER AND PIPE SIZES.
 6. LARGER STORAGE CAPACITY MAY BE PROVIDED WITH A DEEPER SUMP DEPOT.
- PRECAST SPECIFICATIONS:
1. PRECAST CONCRETE MANHOLE AS MANUFACTURED BY SUPERIOR CONCRETE OR APPROVED EQUAL.
 2. CONCRETE: 4,000 PSI AFTER 28 DAYS.
 3. REINFORCING: H-20 LOADING, 4 X 4/4 X 4 W.W.M. SLAB TOP -NO. 5'S @ 8" O.C.
 4. SHIPLAP JOINTS SEALED WITH 1 STRIP OF 1" DIA. BUTYL RUBBER SEALANT.
 5. EACH CASTING TO HAVE LIFTING HOLES CAST IN.
 6. LENGTH AND DIAMETER OF TRAP VARIES WITH PIPE.

NOTE: CONTRACTOR SHOULD CONFIRM SYSTEM PARTS AND OBTAIN SHOP DRAWINGS FROM MANUFACTURER PRIOR TO CONSTRUCTION.

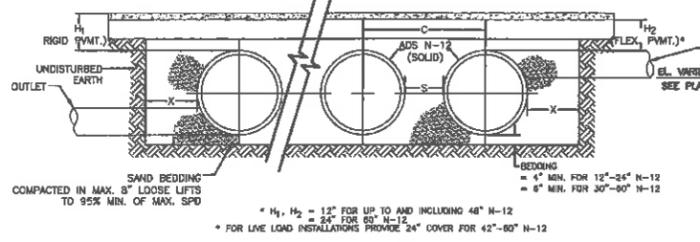


- NOTES:
1. PRECAST CONCRETE MAN HOLE AS MANUFACTURED BY SUPERIOR CONCRETE OR APPROVED EQUAL.
 2. CONCRETE: 4,000 PSI AFTER 28 DAYS.
 3. REINFORCING: H-20 LOADING, 4 X 4/4 X 4 W.W.M. SLAB TOP -NO. 5'S @ 8" O.C.
 4. SHIPLAP JOINTS SEALED WITH 1 STRIP OF 1" DIA. BUTYL RUBBER SEALANT.
 5. EACH CASTING TO HAVE LIFTING HOLES CAST IN.
 6. LENGTH AND DIAMETER OF TRAP VARIES WITH PIPE.

OUTLET CONTROL STRUCTURE TABLE

| OCS | RM | ORIFICE | SIZE (N.) | ELEV. | IN/IN (SIZE) | IN/IN (ELEV) | IN/OUT (SIZE) | IN/OUT (ELEV) |
|-----|--------|---------|-----------|--------|--------------|--------------|---------------|---------------|
| #1 | 209.10 | A | 3" DIA. | 203.00 | 24" | 203.00 | 12" | 203.00 |
| | | B | 6" DIA. | 204.65 | | | | |
| | | C | 12" DIA. | 206.80 | | | | |

PRECAST CONCRETE OUTLET CONTROL STRUCTURE (OCS) FOR UNDERGROUND DETENTION SYSTEM
NOT TO SCALE

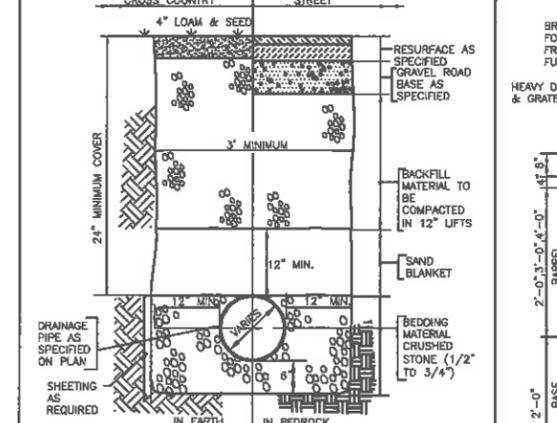


NOTES:

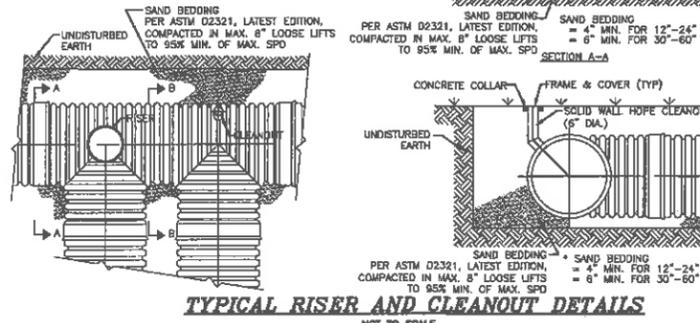
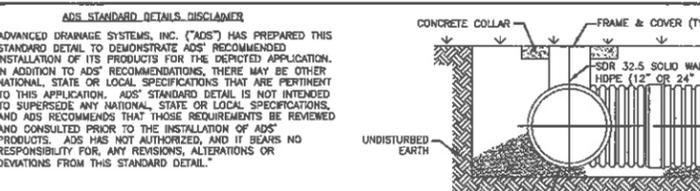
1. ALL DETENTION SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST EDITION.
2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.
3. SEE GRADING & DRAINAGE PLAN FOR INVERT DATA.
4. EXISTING TOPSOIL, BRUSH, TREES, Boulders, FILL AND DEBRIS TO BE REMOVED FOR 5' ALL AROUND UNDERGROUND DETENTION SYSTEM DOWN TO NATIVE MATERIAL. BACKFILL WITH STONE BEDDING MATERIAL (CLASS 1A OR 1B).

| NOMINAL DIAMETER | NOMINAL O.D. | TYPICAL SPACING "S" | TYPICAL SPACING "C" | TYPICAL SIDE WALL "X" |
|------------------|--------------|---------------------|---------------------|-----------------------|
| 12" | 14.5" | 11" | 25.4" | 8" |
| 15" | 18" | 12" | 28.9" | 8" |
| 18" | 21" | 13" | 33.9" | 9" |
| 24" | 28" | 13" | 40.7" | 10" |
| 30" | 36" | 16" | 53.1" | 18" |
| 36" | 42" | 22" | 63" | 18" |
| 42" | 48" | 34" | 71.9" | 18" |

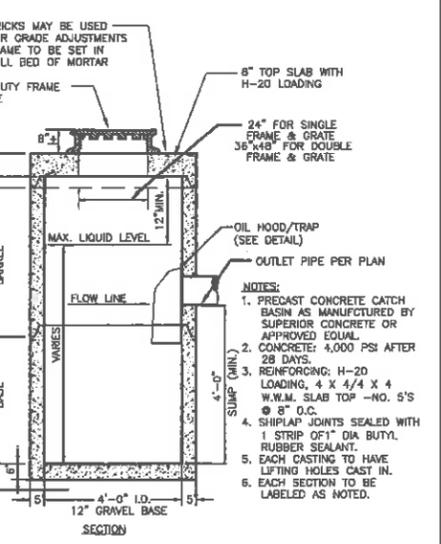
TYPICAL UNDERGROUND DETENTION SYSTEM CROSS SECTION
NOT TO SCALE



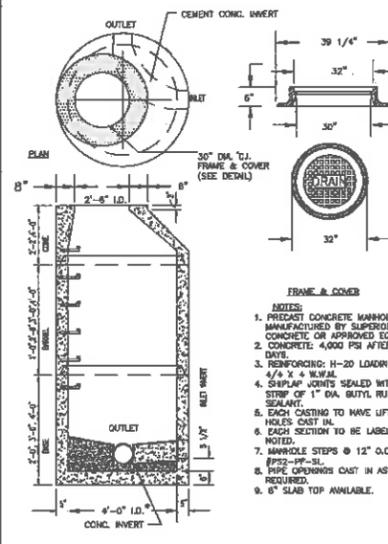
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NOT TO SCALE



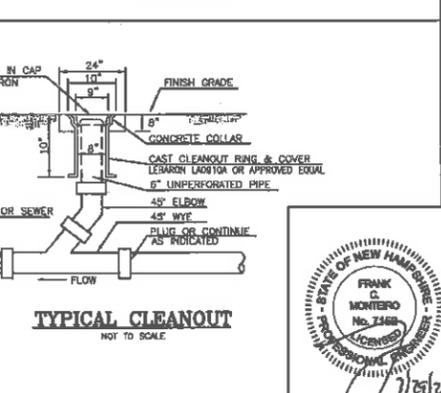
TYPICAL RISER AND CLEANOUT DETAILS
NOT TO SCALE



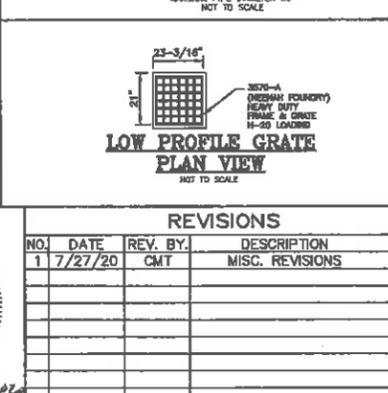
PRECAST CONCRETE CATCH BASIN WITH HOOD
NOT TO SCALE



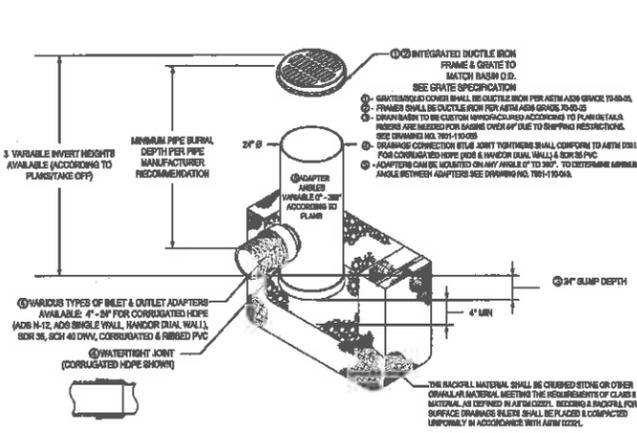
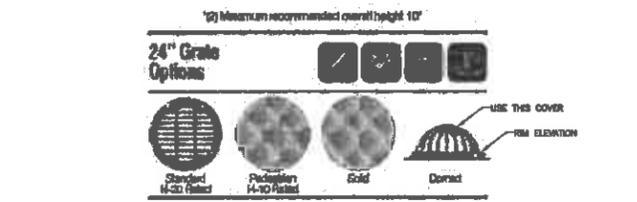
PRECAST CONCRETE DRAIN MANHOLE
MAXIMUM PIPE DIAMETER 30"
NOT TO SCALE



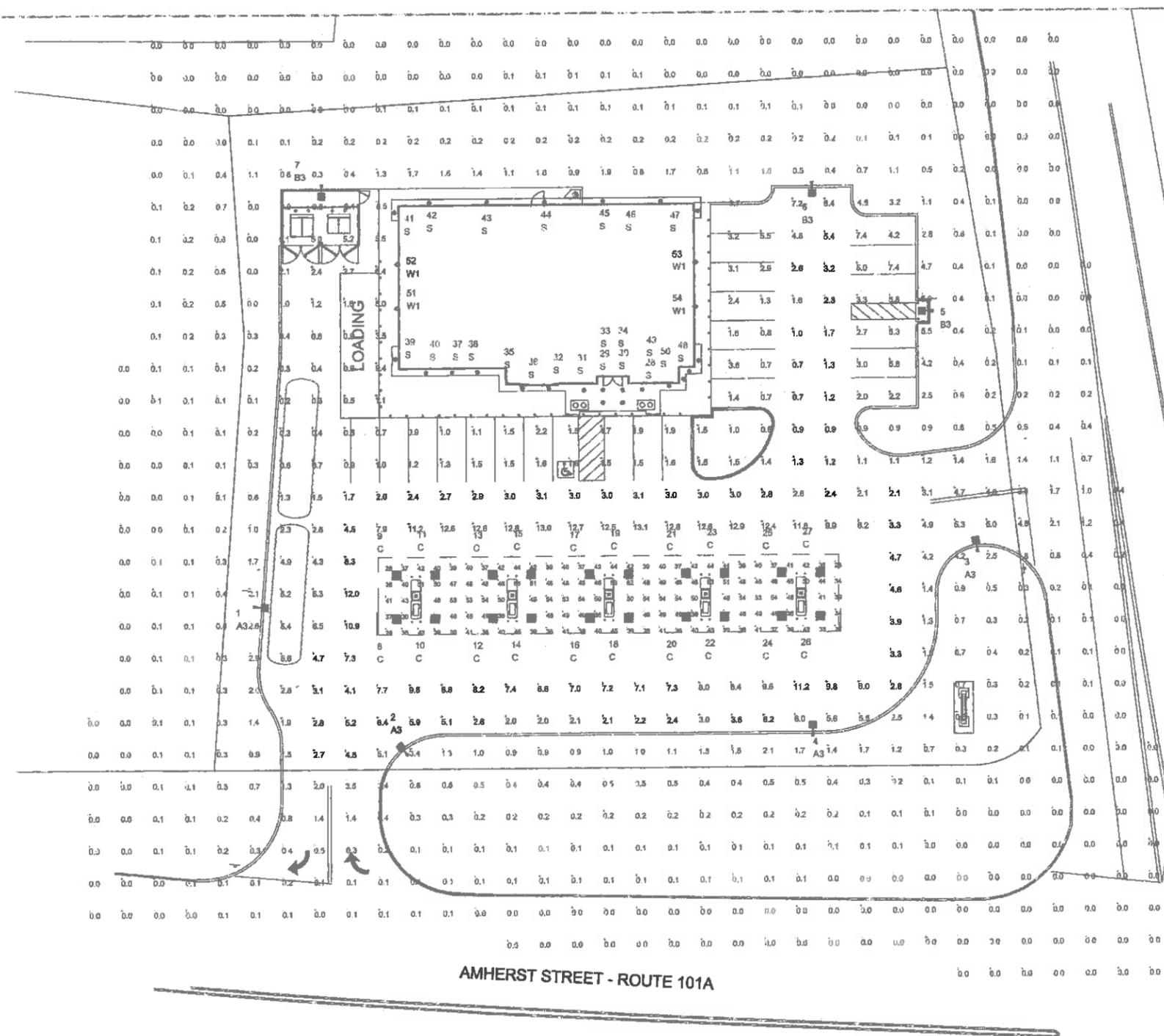
TYPICAL CLEANOUT
NOT TO SCALE



LOW PROFILE GRATE PLAN VIEW
NOT TO SCALE



YARD DRAIN DETAIL
NOT TO SCALE



NOTE:
- POLE MOUNTED FIXTURES ARE MOUNTED ON A 20FT POLE
ATOP A 6 INCH HIGH CONCRETE BASE.

| LUM. NO. | LABEL | MTG. HT. |
|----------|-------|----------|
| 1 | A3 | 15 |
| 2 | A3 | 15 |
| 3 | A3 | 15 |
| 4 | A3 | 15 |
| 5 | B3 | 15 |
| 6 | B3 | 15 |
| 7 | B3 | 15 |
| 8 | C | 15 |
| 9 | C | 15 |
| 10 | C | 15 |
| 11 | C | 15 |
| 12 | C | 16 |
| 13 | C | 16 |
| 14 | C | 15 |
| 15 | C | 15 |
| 16 | C | 15 |
| 17 | C | 15 |
| 18 | C | 15 |
| 19 | C | 15 |
| 20 | C | 15 |
| 21 | C | 15 |
| 22 | C | 15 |
| 23 | C | 15 |
| 24 | C | 15 |
| 25 | C | 15 |
| 26 | C | 15 |
| 27 | C | 15 |

| LUM. NO. | LABEL | MTG. HT. |
|----------|-------|----------|
| 28 | S | 12 |
| 29 | S | 16.748 |
| 30 | S | 12 |
| 31 | S | 16.748 |
| 32 | S | 12 |
| 33 | S | 16.748 |
| 34 | S | 16.748 |
| 35 | S | 12 |
| 36 | S | 12 |
| 37 | S | 12 |
| 38 | S | 12 |
| 39 | S | 12 |
| 40 | S | 12 |
| 41 | S | 12 |
| 42 | S | 12 |
| 43 | S | 12 |
| 44 | S | 12 |
| 45 | S | 12 |
| 46 | S | 12 |
| 47 | S | 12 |
| 48 | S | 12 |
| 49 | S | 12 |
| 50 | S | 12 |
| 51 | W1 | 10 |
| 52 | W1 | 10 |
| 53 | W1 | 10 |
| 54 | W1 | 10 |

| FOOTCANDLE LEVELS CALCULATED AT GRADE USING INITIAL LUMEN VALUES | | | | | |
|--|-------|------|-----|--------|--------|
| LABEL | AVG | MAX | MIN | AVGMIN | MAXMIN |
| CANOPY | 43.54 | 54 | 27 | 1.81 | 2.00 |
| PAVED AREA | 4.02 | 13.1 | 0.2 | 20.10 | 85.50 |
| UNDEFINED AREA | 0.38 | 8.5 | 0.0 | N.A. | N.A. |

| LUMINAIRE SCHEDULE | QTY | LCF | DYNAMIC LUMEN MULTIPLIER | AVG | SUSTAINING | WATT/LUMINAIRE | TOTAL WATTS | MANUFACTURER | DESCRIPTION |
|--------------------|-------|-------|--------------------------|-------|------------|----------------|-------------|-----------------|---|
| 4 A3 SINGLE | 7598 | 1.030 | 1.000 | 1.030 | B1-U0-G2 | 134 | 638 | CREE, INC. | ARE-EDG-3MB-DA-08-E-ULWH-700-57K-DIM |
| 20 C SINGLE | 13251 | 1.030 | 1.000 | 1.030 | B3-U0-G1 | 134 | 2880 | CREE, INC. | CAN-304-SL-RS-08-E-UL-700-57K-DIM |
| 4 W1 SINGLE | 1947 | 1.000 | 1.000 | 1.000 | N.A. | 27.7 | 110.8 | FCVSSL Lighting | FCC816W-UNV-35K-CR193-16L-WH-U72-U72-LD |

| REV | BY | DATE | DESCRIPTION |
|-----|-----|------|-------------|
| 1 | ... | ... | ... |

AREA



ARE-EDG-3MB-DA-06-E-UL-WH-700-57K-DIM



ARE-EDG-4MB-DA-06-E-UL-WH-700-57K-DIM

Cree Edge® Series

LED Area Flood Luminaires
 The Cree Edge® Area Flood Luminaires are rugged and durable lighting solutions for industrial and commercial applications. They feature a wide range of beam spreads and are available in multiple wattage options. The Cree Edge Area Flood Luminaires are designed for long life and are suitable for use in a variety of environments.



| Model | Wattage | Beam Spread | Mounting |
|---------------------------------------|---------|-------------|----------|
| ARE-EDG-3MB-DA-06-E-UL-WH-700-57K-DIM | 300W | 30° | 30° |
| ARE-EDG-4MB-DA-06-E-UL-WH-700-57K-DIM | 400W | 40° | 40° |

| Model | Wattage | Beam Spread | Mounting |
|---------------------------------------|---------|-------------|----------|
| ARE-EDG-3MB-DA-06-E-UL-WH-700-57K-DIM | 300W | 30° | 30° |
| ARE-EDG-4MB-DA-06-E-UL-WH-700-57K-DIM | 400W | 40° | 40° |



CANOPY



CAN-304-SL-RS-06-E-UL-700-57K-DIM

304 Series™

LED Flood Canopy Luminaires
 The Cree 304 Series LED Flood Canopy Luminaires are designed for use in industrial and commercial applications. They feature a wide range of beam spreads and are available in multiple wattage options. The Cree 304 Series LED Flood Canopy Luminaires are designed for long life and are suitable for use in a variety of environments.



| Model | Wattage | Beam Spread | Mounting |
|-----------------------------------|---------|-------------|----------|
| CAN-304-SL-RS-06-E-UL-700-57K-DIM | 700W | 30° | 30° |

| Model | Wattage | Beam Spread | Mounting |
|-----------------------------------|---------|-------------|----------|
| CAN-304-SL-RS-06-E-UL-700-57K-DIM | 700W | 30° | 30° |



SOFFIT



KR6-30L-40K-120V-10V + KR6T-SSGCG-WF + KR6TA

KR Series

LED Flood Soffit Luminaires
 The Cree KR Series LED Flood Soffit Luminaires are designed for use in industrial and commercial applications. They feature a wide range of beam spreads and are available in multiple wattage options. The Cree KR Series LED Flood Soffit Luminaires are designed for long life and are suitable for use in a variety of environments.



| Model | Wattage | Beam Spread | Mounting |
|--|---------|-------------|----------|
| KR6-30L-40K-120V-10V + KR6T-SSGCG-WF + KR6TA | 300W | 30° | 30° |

| Model | Wattage | Beam Spread | Mounting |
|--|---------|-------------|----------|
| KR6-30L-40K-120V-10V + KR6T-SSGCG-WF + KR6TA | 300W | 30° | 30° |



WALL MOUNTED



FCC618W-120V-35K-15L-WH-U-70-D-70

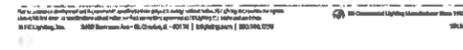
FC LIGHTING

FCC618W
 The Cree FCC618W Series Wall Mounted LED Flood Light is designed for use in industrial and commercial applications. It features a wide range of beam spreads and is available in multiple wattage options. The Cree FCC618W Series Wall Mounted LED Flood Light is designed for long life and is suitable for use in a variety of environments.



| Model | Wattage | Beam Spread | Mounting |
|-----------------------------------|---------|-------------|----------|
| FCC618W-120V-35K-15L-WH-U-70-D-70 | 180W | 30° | 30° |

| Model | Wattage | Beam Spread | Mounting |
|-----------------------------------|---------|-------------|----------|
| FCC618W-120V-35K-15L-WH-U-70-D-70 | 180W | 30° | 30° |



Cree Edge® LED Area Flood Luminaires

Product Specifications

| Model | Wattage | Beam Spread | Mounting |
|---------------------------------------|---------|-------------|----------|
| ARE-EDG-3MB-DA-06-E-UL-WH-700-57K-DIM | 300W | 30° | 30° |
| ARE-EDG-4MB-DA-06-E-UL-WH-700-57K-DIM | 400W | 40° | 40° |



304 Series™ LED Flood Canopy Luminaires

Product Specifications

| Model | Wattage | Beam Spread | Mounting |
|-----------------------------------|---------|-------------|----------|
| CAN-304-SL-RS-06-E-UL-700-57K-DIM | 700W | 30° | 30° |



KR Series LED Flood Soffit Luminaires

Product Specifications

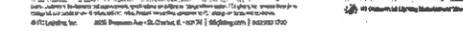
| Model | Wattage | Beam Spread | Mounting |
|--|---------|-------------|----------|
| KR6-30L-40K-120V-10V + KR6T-SSGCG-WF + KR6TA | 300W | 30° | 30° |

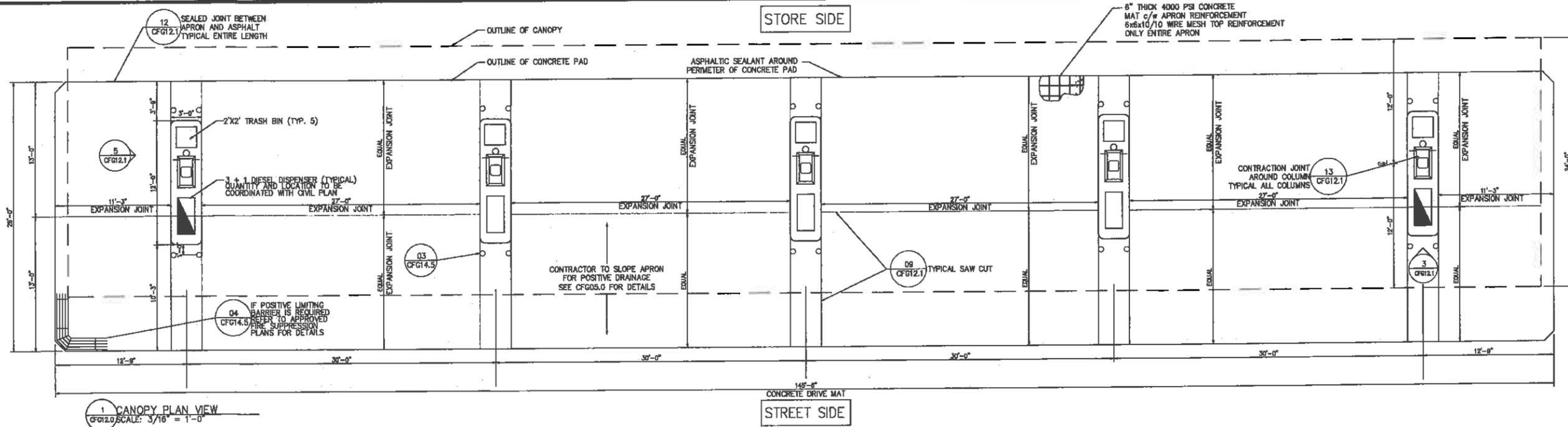


FCC618W Series

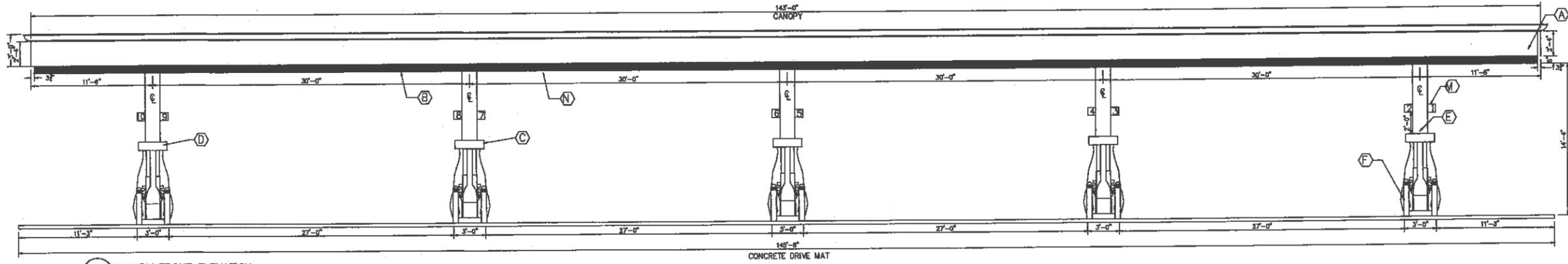
Product Specifications

| Model | Wattage | Beam Spread | Mounting |
|-----------------------------------|---------|-------------|----------|
| FCC618W-120V-35K-15L-WH-U-70-D-70 | 180W | 30° | 30° |



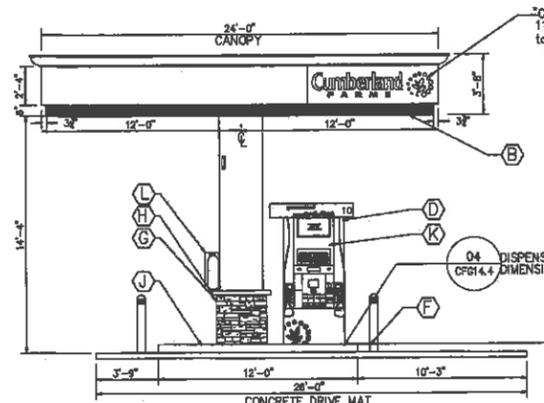


1 CANOPY PLAN VIEW
CFG12.0 SCALE: 3/16" = 1'-0"

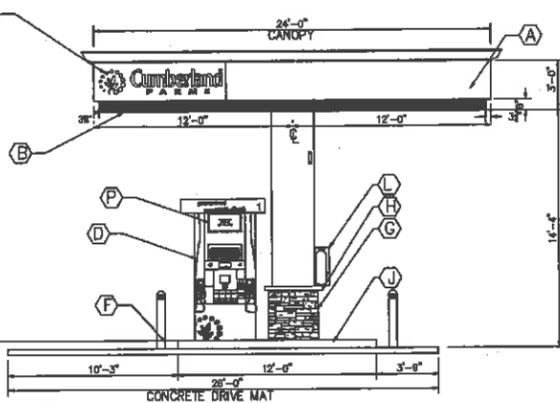


2 CANOPY FRONT ELEVATION
CFG12.0 SCALE: 3/16" = 1'-0"

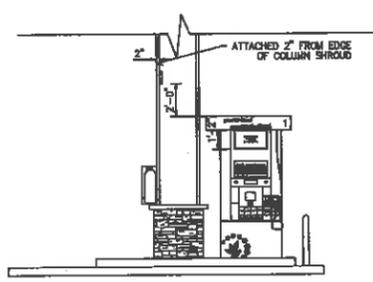
- NOTES:
- COORDINATE APRON ELEVATIONS WITH CIVIL DRAWINGS AND FIELD ELEVATIONS.
 - DISPENSER SUMPS TO BE SET IN PLACE AND USED AS A FORM TO POUR CONCRETE AROUND.
 - CONCRETE SPECIFICATIONS:
 - SOIL BEARING CAPACITY REQ'D: AS PER GEOTECHNICAL REPORT
 - CONC. STRENGTH: 4000psi @ 28 DAYS 3% TO 7% AIR.
 - BROOM FINISH WITH TWO COATS SEALING/CURING COMPOUND.
 - CANOPY FOOTING CONC. STRENGTH: REFER TO DRAWINGS PROVIDED BY MANUFACTURER
 - ALL EQUIPMENT INSTALLATIONS MUST COMPLY WITH MANUFACTURER'S SPECIFICATIONS.
 - ALL EQUIPMENT AND CONSTRUCTION ARE NEW AND FACILITY IS TO BE ATTENDED SELF-SERVICE.
 - REFER TO CANOPY MANUFACTURERS DRAWINGS FOR SPECIFIC CANOPY FOOTING OPTIONS.
 - REFER TO CFG12.1 FOR ARCHITECTURAL DETAILS ON CANOPY AND COLUMNS
 - SEE CIVIL PLANS FOR ORIENTATION ON SITE, AND FOR TRAFFIC FLOW
 - REFER TO CANOPY DETAIL SCHEDULE ON SHEET CFG12.1 FOR ADDITIONAL INFORMATION



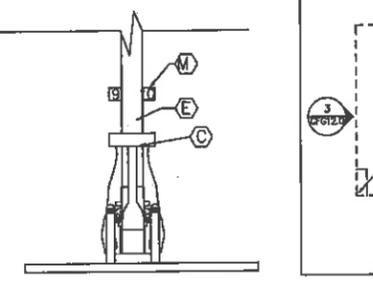
3 CANOPY LEFT ELEVATION
CFG12.0 SCALE: 3/16" = 1'-0"



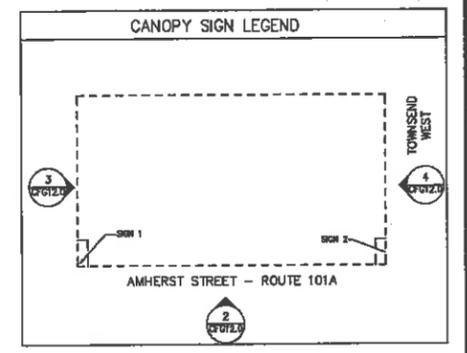
4 CANOPY RIGHT ELEVATION
CFG12.0 SCALE: 3/16" = 1'-0"



5 GAS DISPENSER # SIGN LOCATION DETAIL
CFG12.0 SCALE: 3/16" = 1'-0"



6 GAS DISPENSER # SIGN LOCATION DETAIL
CFG12.0 SCALE: 3/16" = 1'-0"



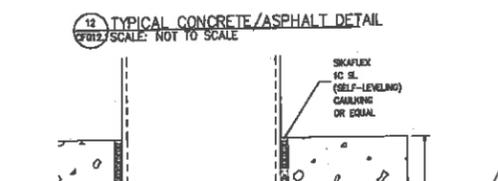
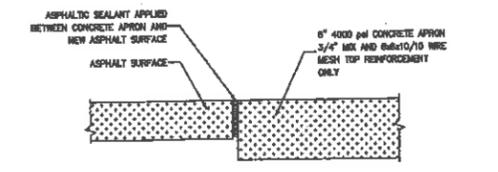
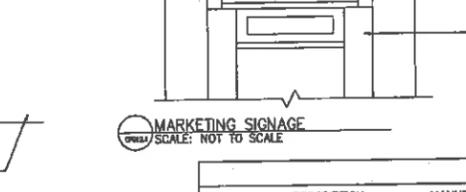
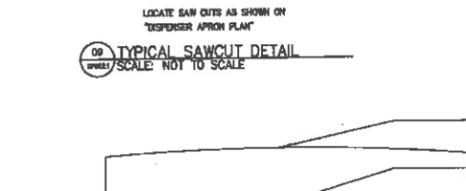
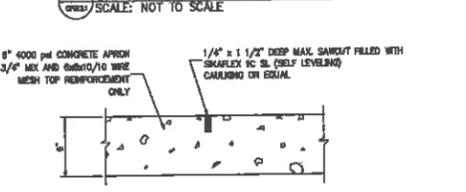
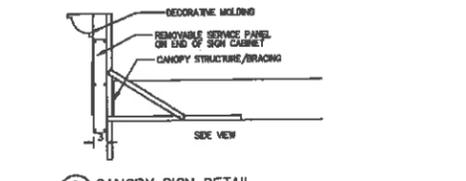
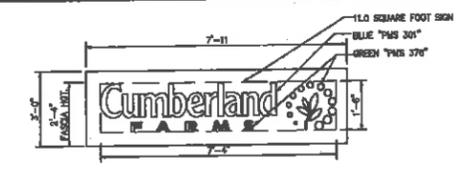
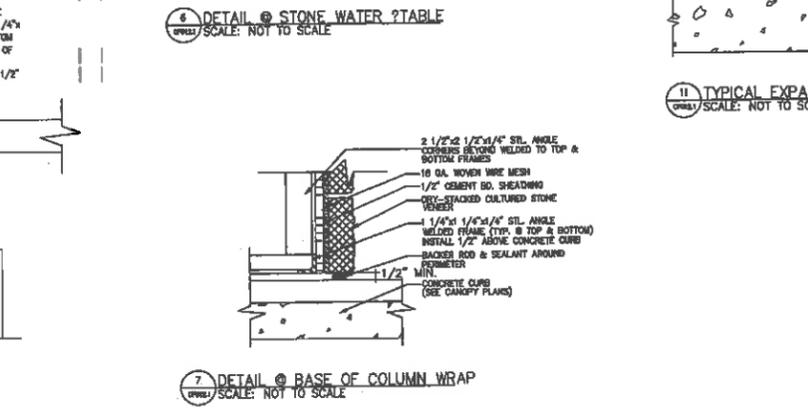
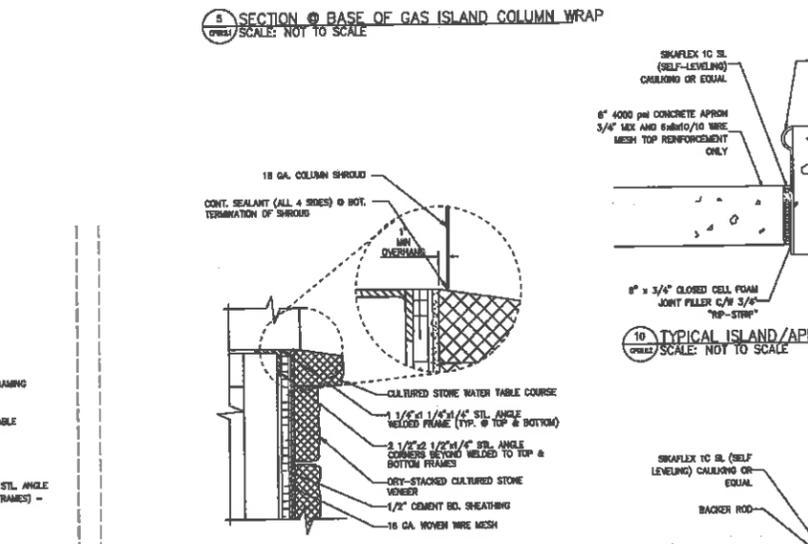
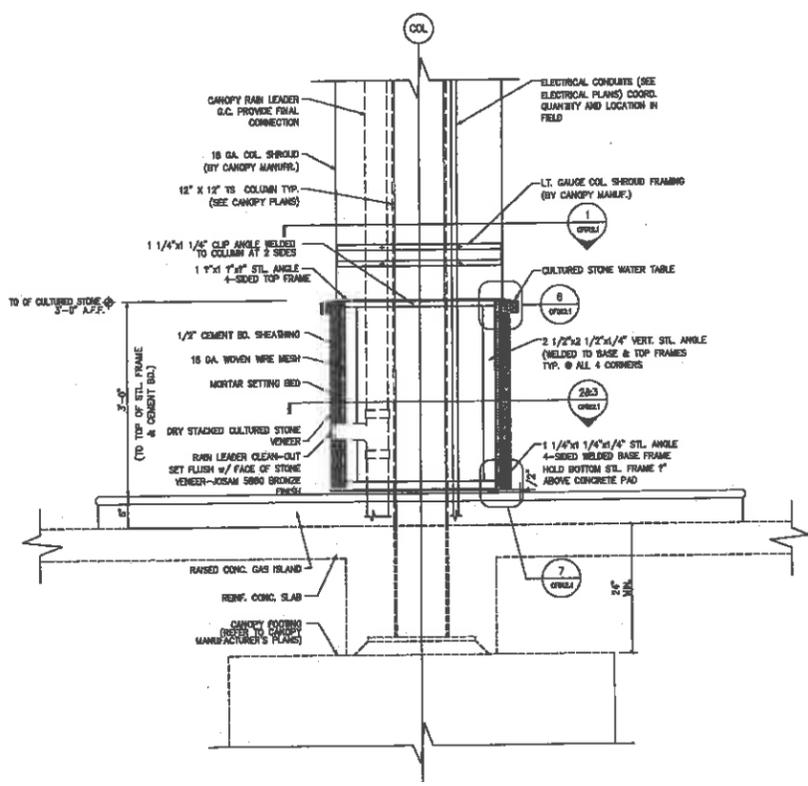
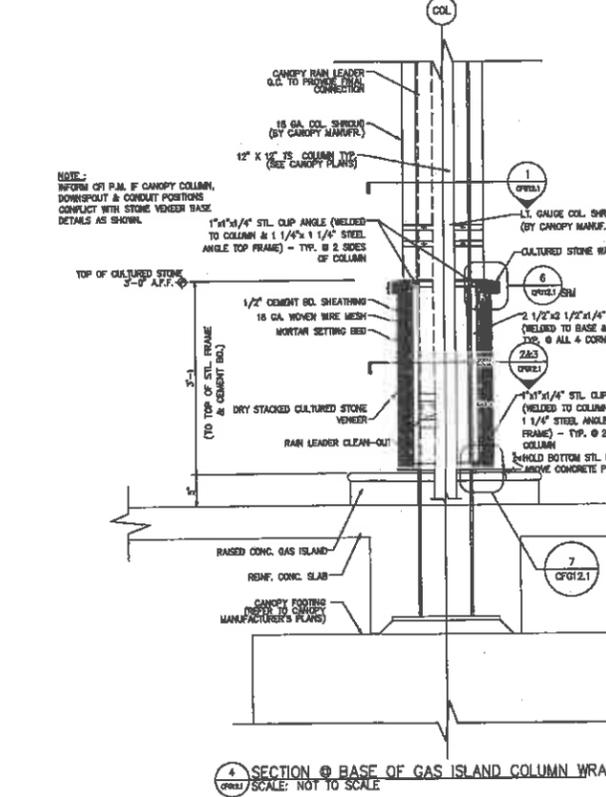
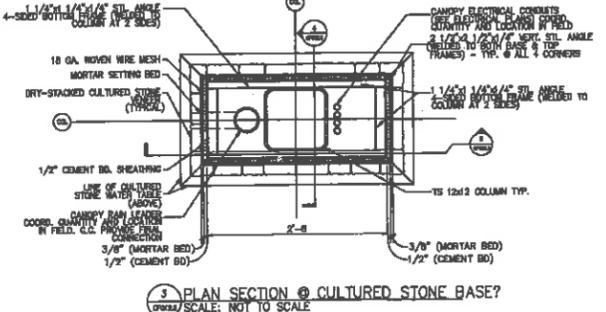
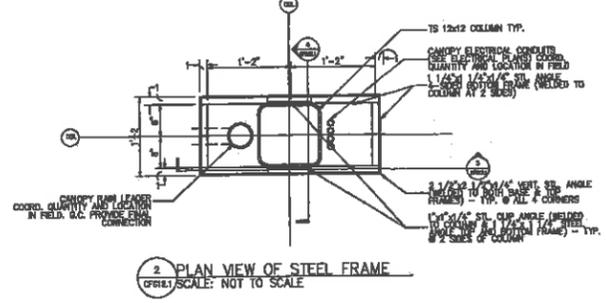
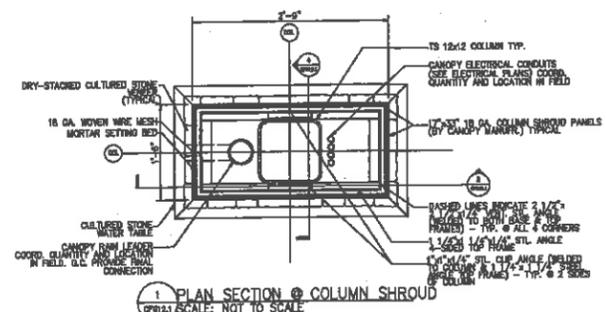
| REVISIONS | | | |
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| NO. | DATE | REV. BY. | DESCRIPTION |
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50,345 SQUARE FEET
1.156 ACRES
V#
Store#
Gas Station#

GPI Engineering Design Planning Construction Management
Greenman-Pedersen, Inc.
44 Stiles Road
Suite One
Salem, NH 03079

452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064
CUMBERLAND FARMS INC.
185 FLANDERS ROAD
WESTBOROUGH, MA 01581
SCALE: AS SHOWN
DATE: 1/30/20
FILE: 4478 12.0-12.1
DRAWN BY: CCC
CHECKED BY: CMT

PROPOSED CANOPY PLAN & ELEVATIONS
CFG12.0



DISPENSER VALANCE GRAPHICS
NOTE: REFER TO TANKS AND PUMP DRAWING FOR LOCATION OF DIESEL DISPENSER

guaranteed great gasoline #

BACKGROUND COLOR WHITE
"guaranteed" COLOR COOL GREY 70
"great gasoline" COLOR PANTONE 376C

guaranteed great diesel #

BACKGROUND COLOR "PROCESS YELLOW"
"guaranteed" COLOR COOL GREY 70
"great diesel" COLOR PANTONE 348C

CANOPY DETAIL SCHEDULE

| MARK | DESCRIPTION | MANUFACTURER | MODEL | COLOR | QUANTITY | REMARKS |
|------|--------------------------------------|---------------------|--------------------------|----------------------------------|----------|--|
| A | CANOPY FASCIA | ALCOA | ACM: RYNOBOND | BRITE WHITE | PER PLAN | BY CANOPY MFR. |
| B | CANOPY STRIPING | ALCOA | ACM: RYNOBOND | BRITE GREEN | PER PLAN | 8" ACM, BY CANOPY MFR. |
| C | MULTI-PRODUCT DISPENSER | WAYNE | OVATION B12 | | 3 | SUPPLIED BY KENNEDY |
| D | 3+1 DIESEL DISPENSER | WAYNE | OVATION B23 | | 2 | SUPPLIED BY KENNEDY |
| E | CANOPY COLUMN SHROUDS | | | | 5 | 17"x33" SHROUDS |
| F | BOLLARDS | UNIVERSAL | 6" D X 42"H | BRITE WHITE | 20 | BOLLARDS SUPPLIED BY GC |
| G | CULTURED STONE VENEER | OWENS CORNING | CSV-2028 | ECHO RIDGE | PER PLAN | BY CUMBERLAND FARMS BY GC IN FLORIDA STATES |
| H | CULTURED STONE CAPS | OWENS CORNING | CSV-2028 | ECHO RIDGE | PER PLAN | BY CUMBERLAND FARMS INSTALLED BY GC |
| J | DISPENSER ISLAND FORM | RIVERSIDE STEEL | | STAINLESS STEEL | 5 | SUPPLIED BY KENNEDY |
| K | DISPENSER LED PUMP TOPPER | ABLE | | BLACK W/ RED GREEN, & WHITE LEDS | PER PLAN | SUPPLIED BY KENNEDY INSTALLED BY CF |
| L | HAND OPERATED 400C FIRE EXTINGUISHER | LARSON CABINETS | | | 5 | ALL CABINETS IN COLUMN FACING STORE SIDE PROVIDED BY GC. TO BE APPLIED BY GC |
| M | DISPENSER NUMBERING SIGN | | | WHITE W/ GREEN # | 10 | BY CANOPY MFR. |
| N | CANOPY DECKING | | 20 ga EMBOSSED WASH COAT | WHITE | PER PLAN | BY CANOPY MFR. |
| O | DECORATIVE MOULDING | CANOPY MANUFACTURER | | BRITE WHITE | PER PLAN | BY CANOPY MFR. |
| P | MARKETING SIGNAGE | | | | PER PLAN | BY CUMBERLAND FARMS INSTALLED BY GC |

REVISIONS

| NO. | DATE | REV. BY | DESCRIPTION |
|-----|------|---------|-------------|
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50,345 SQUARE FEET
1.156 ACRES
V#
Store#
Gas Station#

452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064

CUMBERLAND FARMS INC.
185 FLANDERS ROAD
WESTBOROUGH, MA 01581

PROPOSED CANOPY DETAILS

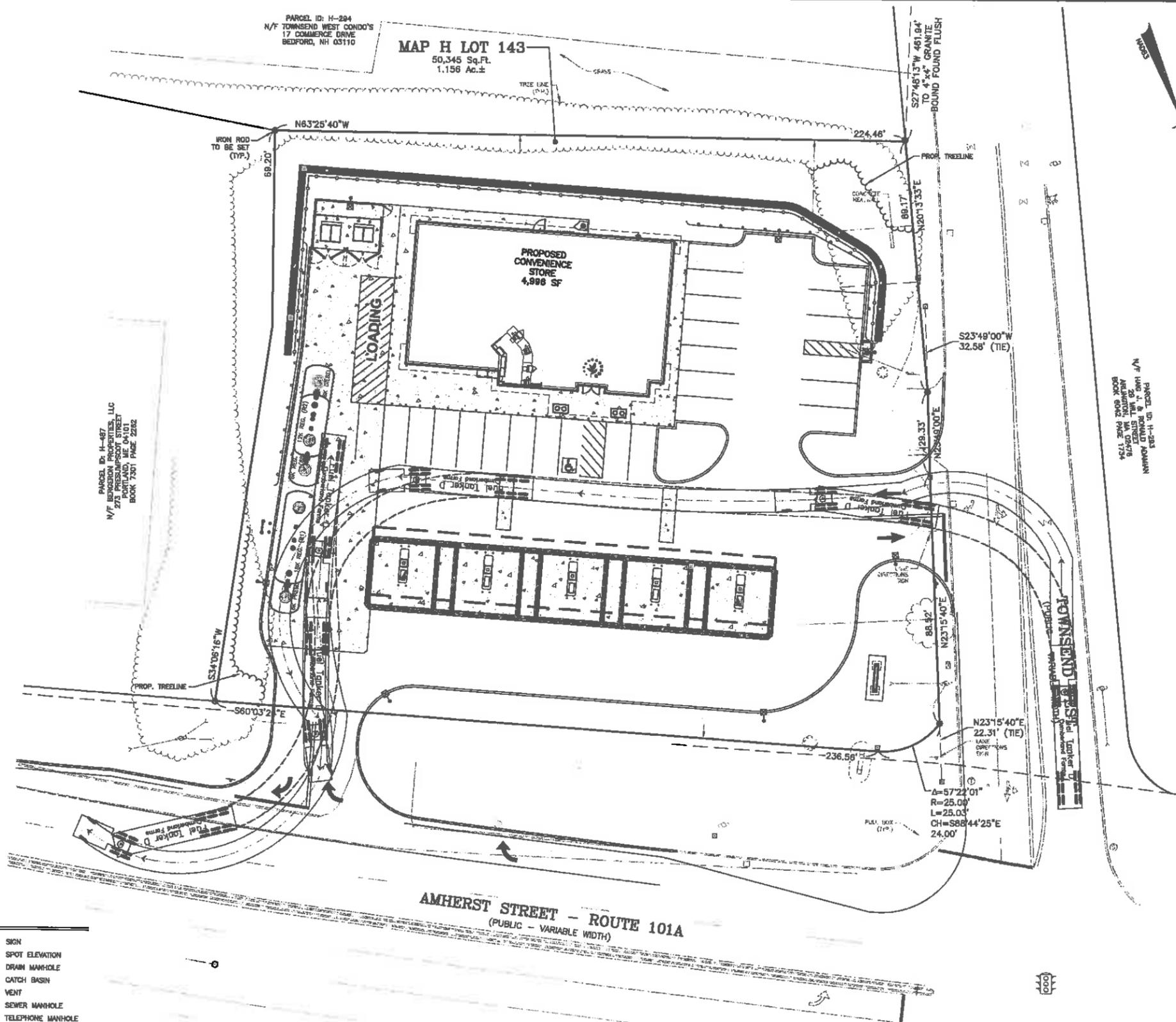
Greenman-Pedersen, Inc.
44 Stiles Road
Suite One
Salem, NH 03079

SCALE: AS SHOWN
DATE: 1/30/20
FILE: 4478 12.0-12.1
DRAWN BY: CCC
CHECKED BY: CMT

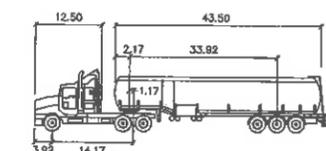
CFG12.1

PARCEL ID: H-284
N/F TOWNSEND WEST CONDO'S
17 COMMENCE DRIVE
BEDFORD, NH 03110

MAP H LOT 143
50,345 Sq.Ft.
1.156 Ac.±



LOCATION MAP
(NOT TO SCALE)



Fuel Tanker D

| Tractor Width | Tractor Height | Tractor Track | Trailer Track | Lock to Lock Time | Steering Angle | Articulating Angle |
|---------------|----------------|---------------|---------------|-------------------|----------------|--------------------|
| : 8.00 | : 8.00 | : 8.00 | : 8.00 | : 6.0 | : 39.0 | : 78.0 |

LEGEND

| | | | |
|--|--------------------------|--|-------------------|
| | VERTICAL GRANITE CURB | | SIGN |
| | CAPE ODD BERM | | SPOT ELEVATION |
| | DOUBLE SOLID LINE YELLOW | | DRAIN MANHOLE |
| | SINGLE SOLID LINE WHITE | | CATCH BASIN |
| | GAS LINE | | VENT |
| | UNDERGROUND TELEPHONE | | SEWER MANHOLE |
| | WATER LINE | | TELEPHONE MANHOLE |
| | UNDERGROUND ELECTRIC | | MANHOLE |
| | POST & RAIL FENCE | | GAS VALVE |
| | GUARDRAIL | | GAS SHUT OFF |
| | CONTOUR ELEVATION | | WATER VALVE |
| | TREE | | WATER SHUT OFF |
| | UTILITY POLE | | FIRE HYDRANT |
| | GUY WIRE | | BOLLARD |
| | OVERHEAD WIRE | | GAS METER |
| | TREELINE | | ELECTRIC METER |
| | PULL BOX | | LIGHT POLE |



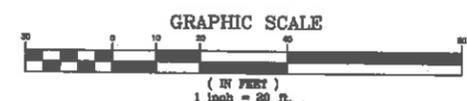
AMHERST STREET - ROUTE 101A
(PUBLIC - VARIABLE WIDTH)

OWNER OF RECORD:
PARCEL ID: H-143
ALLA MAK PROPERTIES, LLC
452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064-1228
BOOK 6671 PAGE 652



| REVISIONS | | | |
|-----------|---------|----------|-----------------|
| NO. | DATE | REV. BY. | DESCRIPTION |
| 1 | 7/27/20 | CMT | MISC. REVISIONS |

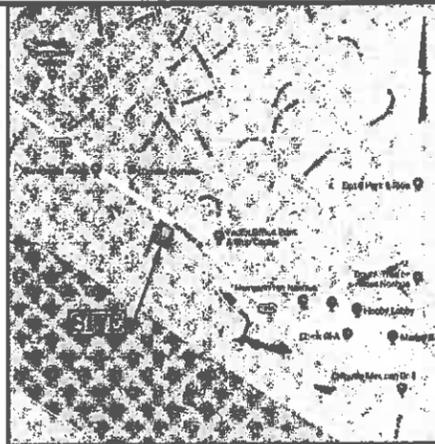
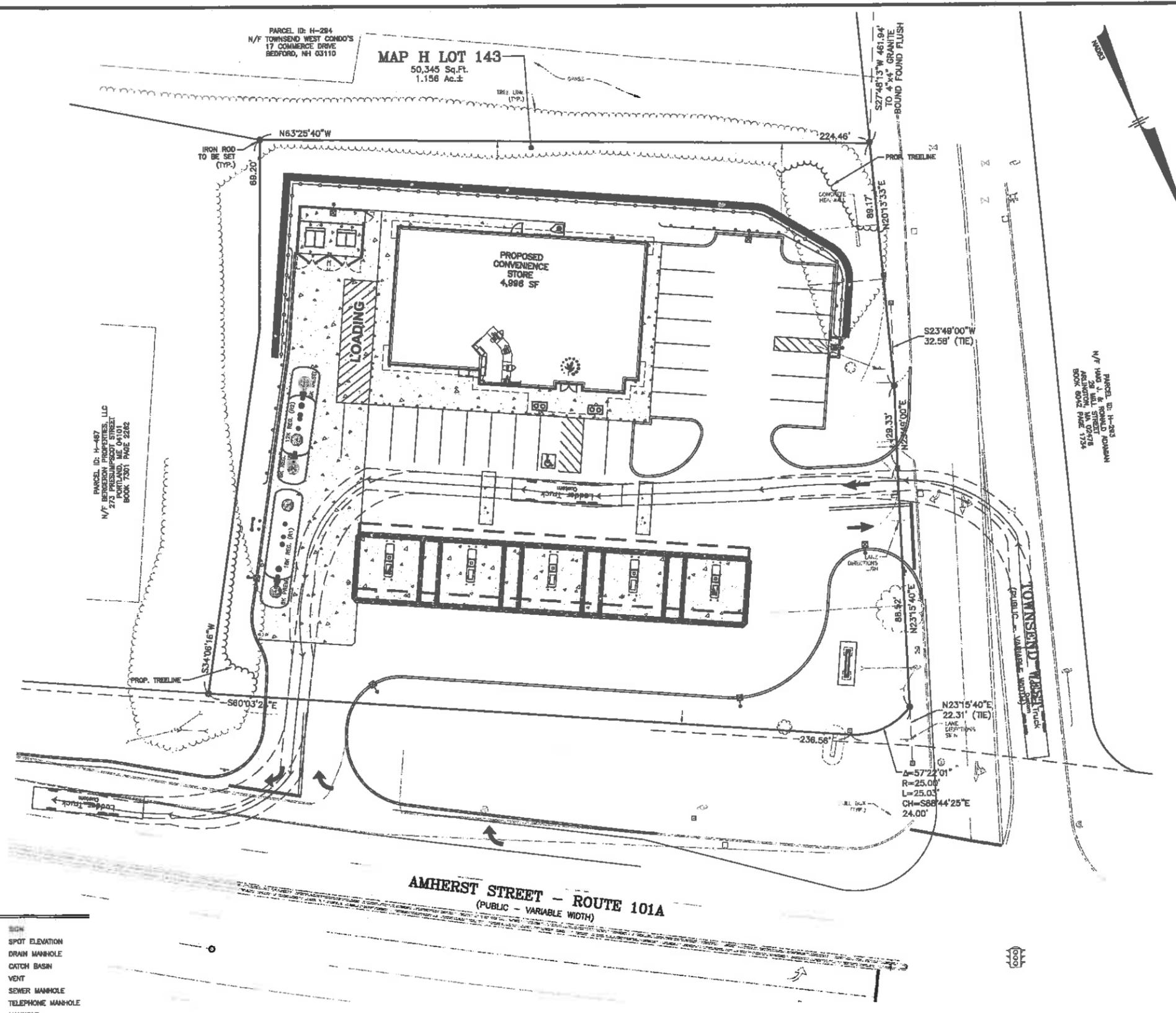
50,345 SQUARE FEET
1.156 ACRES
V#
Store#
Gas Station#



GPI Engineering Design Planning Construction Management
Greenman-Pedersen, Inc.
44 Stiles Road
Suite One
Salem, NH 03079

452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064
Cumberland Farms Inc.
165 FLANDERS ROAD
WESTBOROUGH, MA 01581

TRUCK TURN PLAN CFG16.0



LOCATION MAP
(NOT TO SCALE)

LEGEND

| | | | |
|--|--------------------------|--|-------------------|
| | VERTICAL GRANITE CURB | | SIGN |
| | CAPE COD BERM | | SPOT ELEVATION |
| | DOUBLE SOLID LINE YELLOW | | DRAIN MANHOLE |
| | SINGLE SOLID LINE WHITE | | CATCH BASIN |
| | GAS LINE | | VENT |
| | UNDERGROUND TELEPHONE | | SEWER MANHOLE |
| | WATER LINE | | TELEPHONE MANHOLE |
| | UNDERGROUND ELECTRIC | | MANHOLE |
| | POST & RAIL FENCE | | GAS VALVE |
| | GUARDRAIL | | GAS SHUT OFF |
| | CONTOUR ELEVATION | | WATER VALVE |
| | TREE | | WATER SHUT OFF |
| | UTILITY POLE | | FIRE HYDRANT |
| | GUY WIRE | | BOLLARD |
| | OVERHEAD WIRE | | GAS METER |
| | TREELINE | | ELECTRIC METER |
| | PULL BOX | | LIGHT POLE |



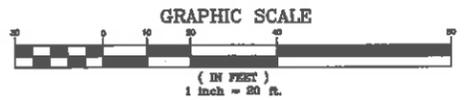
AMHERST STREET - ROUTE 101A
(PUBLIC - VARIABLE WIDTH)

OWNER OF RECORD:
PARCEL ID: H-143
ALLA MAK PROPERTIES, LLC
463 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064-1228
BOOK 5671 PAGE 652



| REVISIONS | | | |
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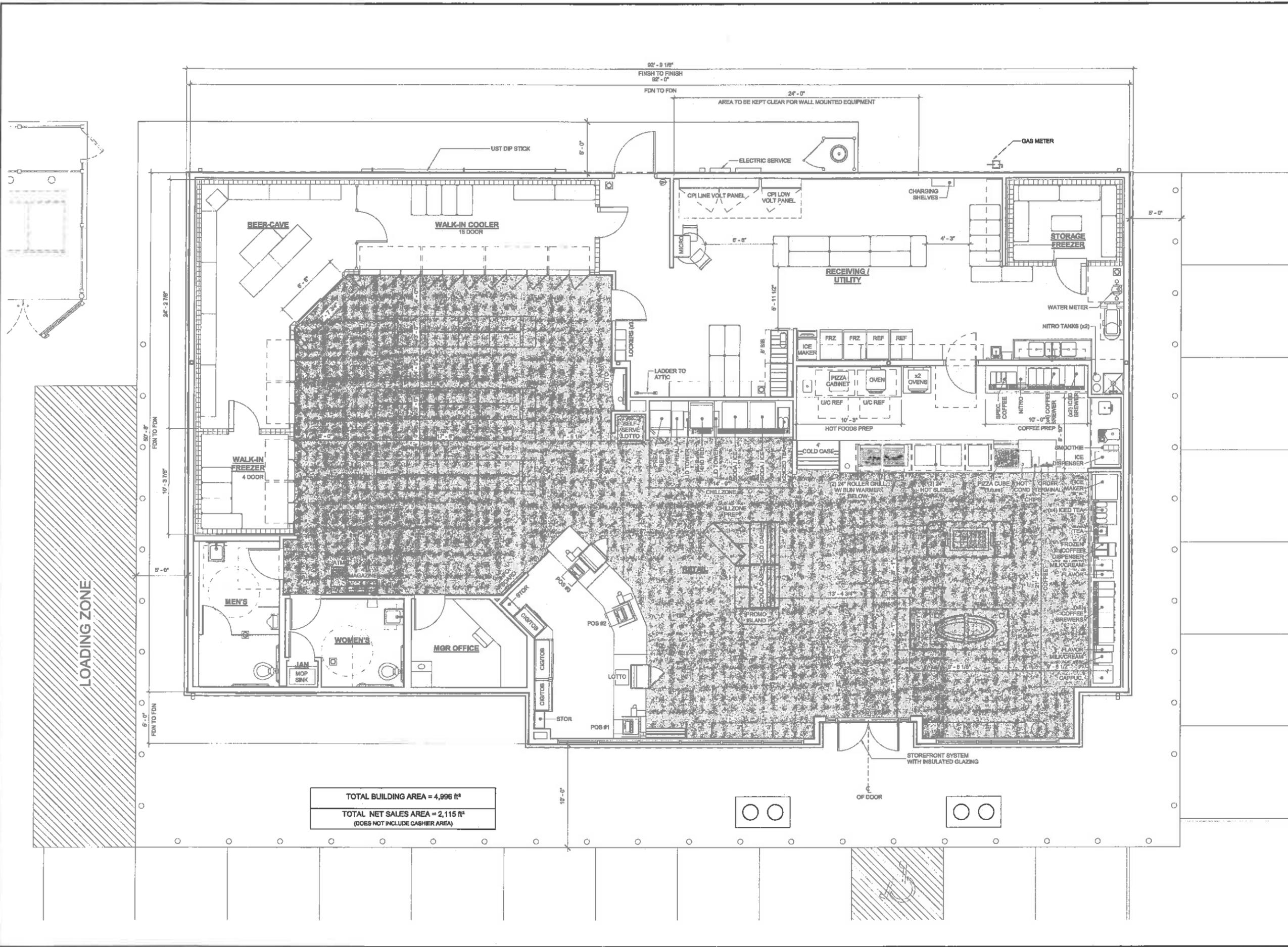
50,345 SQUARE FEET
1.156 ACRES
V#
Store#
Gas Station#



GPI Engineering Design Planning Construction Management
Greenman-Pedersen, Inc.
44 Siles Road
Suite One
Salem, NH 03079

452 AMHERST STREET
NASHUA, NEW HAMPSHIRE 03064
CUMBERLAND FARMS INC.
185 FLANDERS ROAD
WESTBOROUGH, MA 01581
SCALE: 1"=20'
DATE: 7/27/20
FILE: 44765P.dwg
DRAWN BY: CPS
CHECKED BY: CMT

FIRE TRUCK TURN PLAN CFG16.1



TOTAL BUILDING AREA = 4,996 ft²
 TOTAL NET SALES AREA = 2,115 ft²
 (DOES NOT INCLUDE CASHIER AREA)

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Cumberland FARMS
 Store Number: TBD
 100 WILKINSON ST
 NASHUA, NH 03063
 JOB NUMBER: 41-19-00100

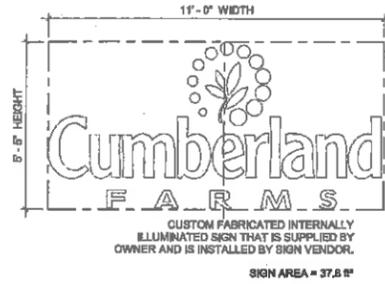
ISSUE BLOCK

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| SD REV | 01/20/20 |
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CHECKED BY: MV
 DRAWN BY: ZC
 DOCUMENT DATE: 01/20/20

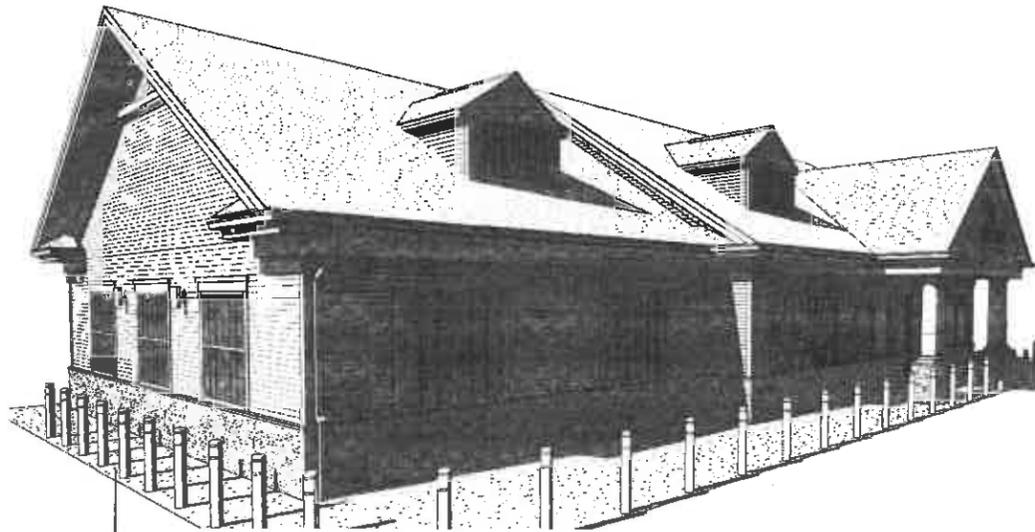
NOT FOR CONSTRUCTION

WALL SIGNAGE SPECIFICATION

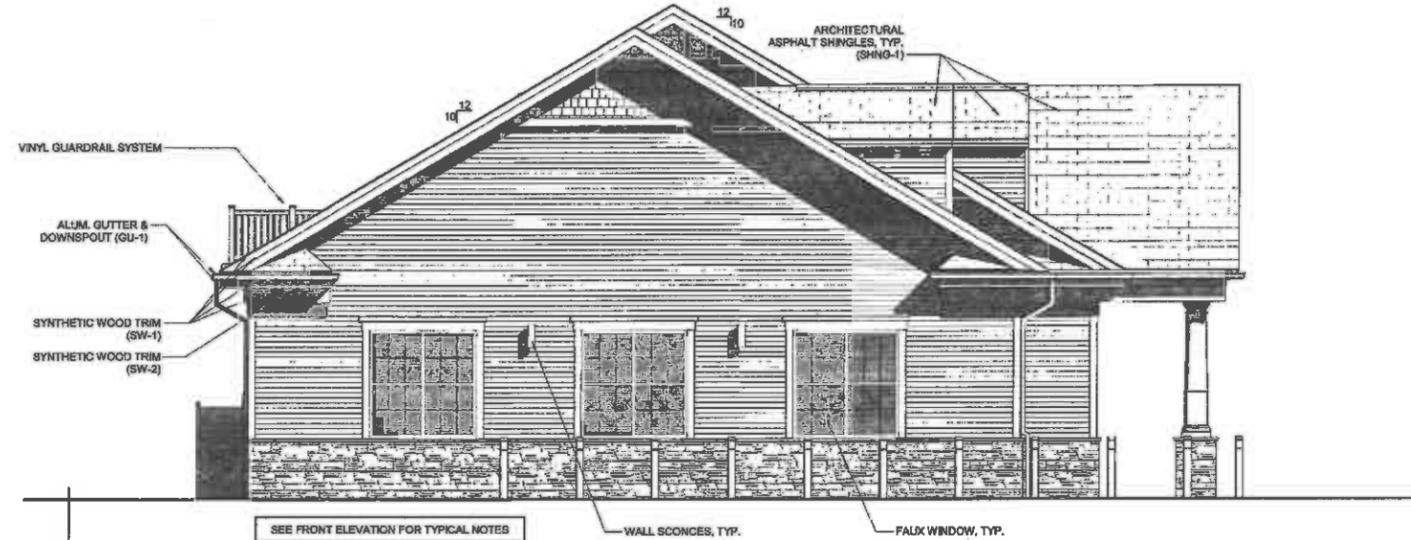


| EXTERIOR FINISH SCHEDULE | | | | | | |
|--------------------------|--------------------------------|-----------------|------------------------|------------------|---|--|
| MARK | DESCRIP. | MANUF. | MODEL | COLOR | NOTES | |
| CS-1 | CULTURED STONE | BORAL | COUNTRY LEDGESTONE | ECHO RIDGE | INSTALL DRYSTACK ONLY | |
| FB-1 | FIBERGLASS COLUMN SHROUD | PACIFIC COLUMNS | | WHITE | 18"x9" ENDURA STONE PLAIN COLUMN ROUND SHAFT WITH TRUE ENTASIS TAPERED SMOOTH FINISH. | |
| SHNG-1 | ARCHITECTURAL ASPHALT SHINGLES | CERTAINTED | LANDMARK | COBBLESTONE GRAY | 30 YEAR WARRANTY | |
| GU-1 | ALUMINUM GUTTER SYSTEM | ATAS | .032 | WHITE | PROVIDE ALL ACCESSORIES REQ'D FOR A COMPLETE CONTINUOUS INSTALLATION. INSTALL PER MANUF. INSTRUCTIONS. ENSURE SEALED, WATER-TIGHT CORNER CONNECTIONS. FLASH & SEAL TO DOWNSPOUTS AS REQ'D. PROVIDE SUPPORT STIFFENERS AT 12" MIN. O.C. GUTTER SHALL BE SEAMLESS & 6" MIN. | |
| SW-1 | SYNTHETIC WOOD TRIM | CERTAINTED | | WHITE | PROVIDE SCARF JOINTS ON ALL EXTERIOR SYNTHETIC WOOD TRIM. G.C. TO PUTTY ALL NAIL HOLES & PAINT ALL SYNTHETIC WOOD TRIM & PANELS. | |
| SW-2 | SYNTHETIC WOOD TRIM | CERTAINTED | | GREEN | PROVIDE SCARF JOINTS ON ALL EXTERIOR SYNTHETIC WOOD TRIM. G.C. TO PUTTY ALL NAIL HOLES & PAINT ALL SYNTHETIC WOOD TRIM & PANELS. | |
| VS-1 | VINYL SIDING | CERTAINTED | MONOGRAM 48L DOUBLE 4" | HERRINGBONE | ROUGH CEDAR FINISH. PROVIDE ALL REQ'D ACCESSORIES & TRIM FOR A COMPLETE INSTALLATION. | |
| V8-2 | VINYL SHAKES | CERTAINTED | NORTHWOODS | SAVANNAH WICKER | ROUGH CEDAR FINISH. PROVIDE ALL REQ'D ACCESSORIES & TRIM FOR A COMPLETE INSTALLATION. | |

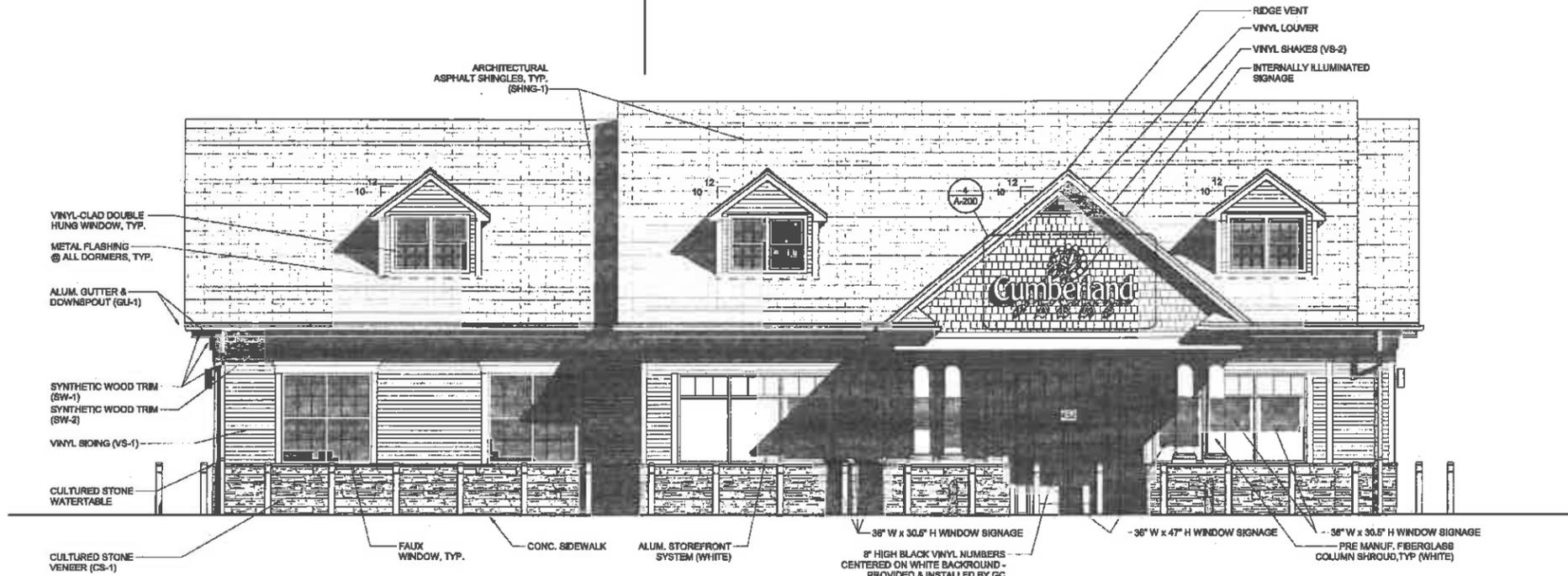
4 FRONT AND SIDE WALL SIGNAGE DETAIL - SD
3/8" = 1'-0"



3 FRONT PERSPECTIVE - SD



2 LEFT ELEVATION - SD
3/16" = 1'-0"



1 FRONT ELEVATION - SD
3/16" = 1'-0"

HFA
HARRISON FRENCH & ASSOCIATES, LTD.
1508.528.0770
31 Heywood Street
Fenwick, Massachusetts 02038
www.hfa-ae.com

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Cumberland FARMS
Store Number: TBD
452 AMHERST ST.
NASHUA, NH 03063
JOB NUMBER: 41-15-0160

| ISSUE BLOCK | | |
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| SD SET | 12/10/19 | |
| SD REV | 01/20/20 | |
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CHECKED BY: MV
DRAWN BY: ZC
DOCUMENT DATE: 01/20/20

NOT FOR CONSTRUCTION

EXTERIOR ELEVATIONS

SHEET:
A-200

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**Cumberland
 FARMS**
 Store Number: TBD
 452 A MARKET ST.
 NASHUA, NH 03063
 JOB NUMBER: 41-18-0100

ISSUE BLOCK

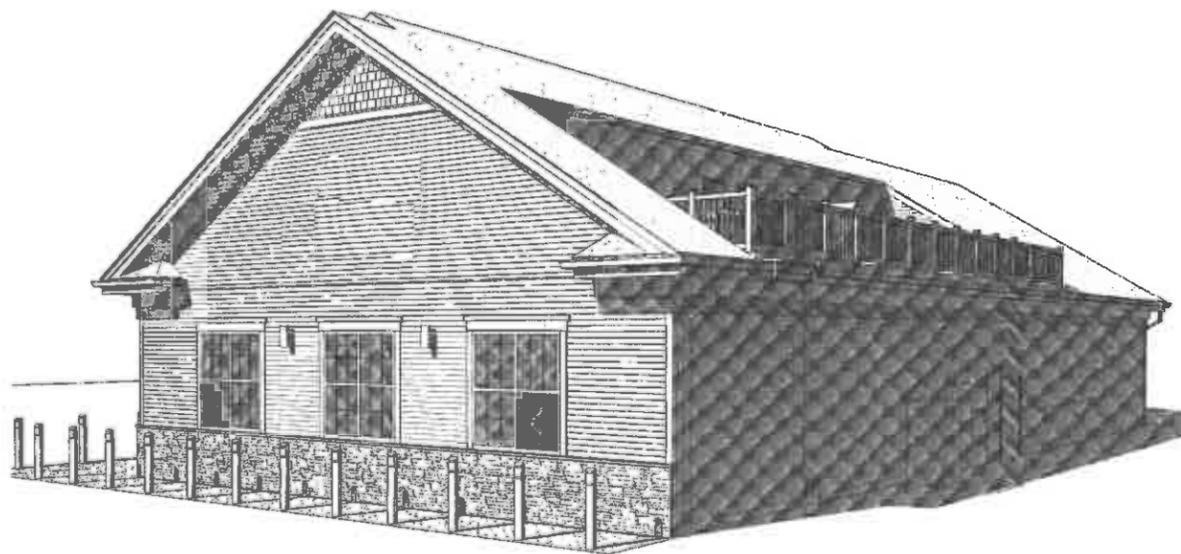
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CHECKED BY: MV
 DRAWN BY: ZC
 DOCUMENT DATE: 01/20/20

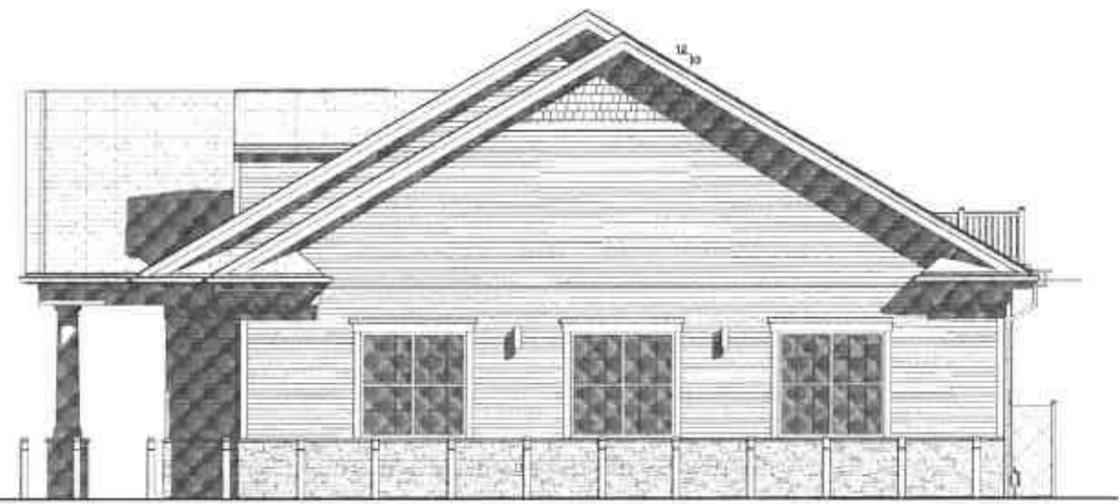
NOT FOR CONSTRUCTION

EXTERIOR
 ELEVATIONS

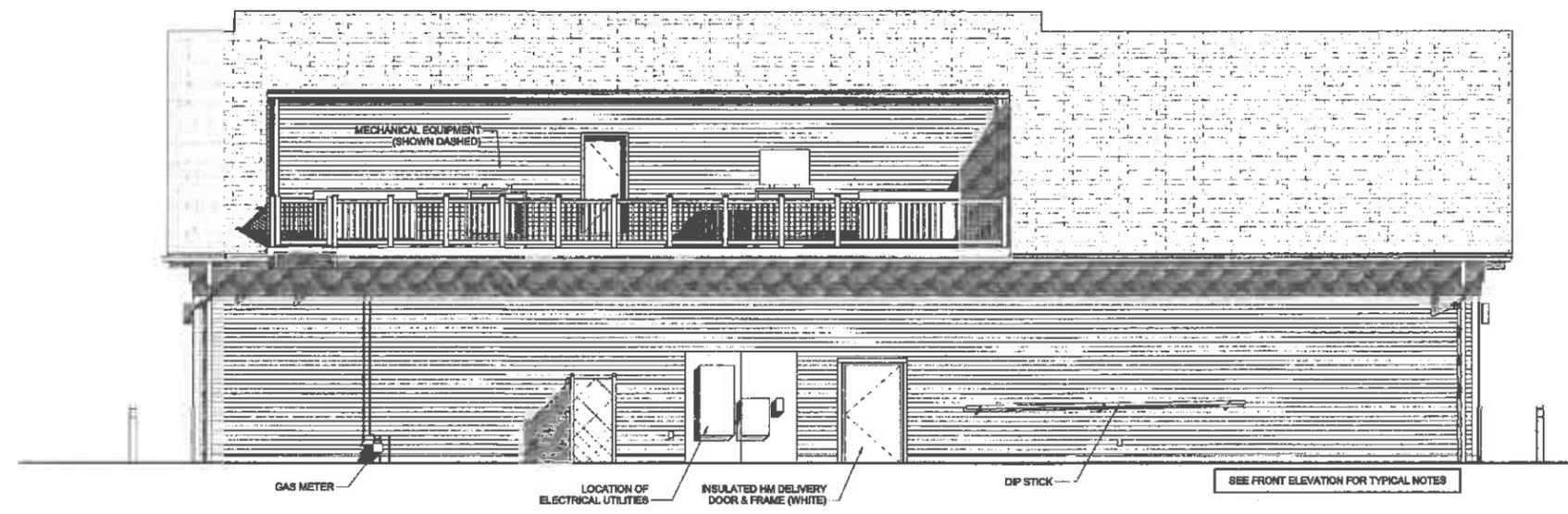
SHEET:
A-201



3 REAR PERSPECTIVE - SD



SEE FRONT ELEVATION FOR TYPICAL NOTES
1 RIGHT ELEVATION - SD
 3/16" = 1'-0"



2 REAR ELEVATION - SD
 3/16" = 1'-0"

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NASHUA CITY PLANNING BOARD
STAFF REPORT

TO: Nashua City Planning Board
FROM: Linda McGhee, Deputy Planning Manager
FOR: September 10, 2020
RE: **New Business #7 - Site Plan**

I. Project Statistics:

Owner: Roscommon Investments, LLC
Proposal: Site plan to show a new 24,020 sf auto body shop with associated site improvements
Location: 117 West Hobart St, “L” West Glenwood St, & “L” West Hobart St
Total Site Area: 220,696 sf
Existing Zoning: RA-Urban Residence & HB-Highway Business
Surrounding Uses: Commercial and residential

II. Background Information:

The property consists of five lots, approximately 5.01 acres. Currently the project area is cleared; however the site was historically comprised of woods and an existing house. The lots are bordered by the Everett Turnpike to the west, BJ’s Wholesale to the south, Nashua Foreign Auto and two residential homes to the east and a car lot and more residential homes to the north.

III. Project Description:

The proposal is to construct a 22,560 sf (22,560 sf footprint and a 1,460 sf mezzanine) auto body shop with overflow auto storage from the Tulley dealership located further south on the Daniel Webster Highway. The project also proposes the reconstruction of a section of Sexton Road to provide adequate access to the site. Site work includes construction of a new building, parking lot and auto storage area, reconstruction of Sexton Road and stormwater management provisions. The proposed stormwater management system will include two proposed detention ponds, a proposed subsurface infiltration system, a treatment swale, and a series of catch basins and drainage pipes which will direct runoff into said pond.

A Traffic Impact Report (TIR) Threshold Worksheet was submitted for this project and indicates that a formal TIR Report is not required as the daily and peak hour trip estimates are below the TIR threshold values.

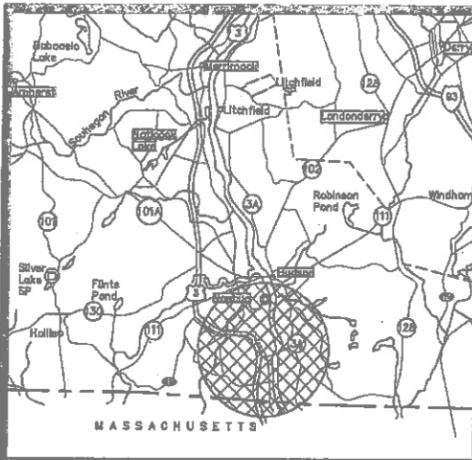
The site will be serviced by underground utilities, Pennichuck water, and city sewer. Hours of operation will be seven days a week, from 6 am to 8 pm. A landscape plan, lighting plan, and building elevations have been submitted as part of this application. One waiver is being requested from the requirement for landscaped islands for every 10 parking spaces in a row.

City Staff reviewed the plans; comments are attached.

Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet, the requirements outlined in the Site Plan NRO § 190-146(D). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, specific reasons should be given. If the Planning Board chooses to approve this plan, staff recommends the following stipulations be made part of that approval:

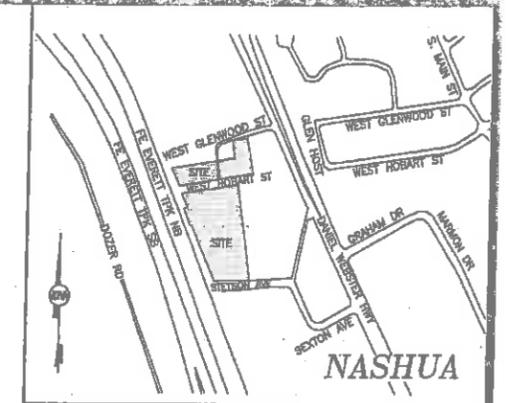
1. The request for a waiver of § 190-184 D (1) which requires parking aisles not contain more than 10 spaces in a row without a planted median and/or island, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
2. Prior to the Chair signing the plan, minor drafting corrections will be made.
3. Prior to the Chair signing the plan, all conditions from the Planning Board approval letter will be added to the cover page of the final mylar and paper copies submitted to the City.
4. Prior to the Chair signing the plan, all comments in an e-mail from Joe Mendola, Street Construction Engineer, dated _____ shall be addressed to the satisfaction of the Engineering Department.
5. Prior to the issuance of a building permit, the lots will be merged.
6. Prior to the issuance of a building permit, all comments in an e-mail from Mark Rapaglia, Inspector/Investigator, dated July 7, 2020 shall be addressed to the satisfaction of the Fire Marshal's Office.
7. Prior to the issuance of a building permit, stormwater documents will be submitted to City staff for review and recorded at the applicant's expense.
8. Prior to the issuance of a building permit, the electronic file of the plan will be submitted to the City of Nashua.
9. Prior to any work on site, a pre-construction meeting shall be held and a financial guarantee shall be approved.
10. Prior to any site disturbance, the Alteration of Terrain Permit for the project shall be approved by NHDES.
11. Prior to the issuance of the Certificate of Occupancy, all off-site and on-site improvements will be completed.



VICINITY PLAN
NOT TO SCALE

NON-RESIDENTIAL SITE PLAN AUTO BODY SHOP

MAP 128 LOTS 31, 32 & 84
MAP 132 LOTS 38 & 84
WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE



LOCATION PLAN
SCALE: 1" = 500' +/-



EXISTING FEATURES WITHIN 1,000-FT
NOT TO SCALE

OWNER/APPLICANT:
ROSCOMMON INVESTMENTS, LLC
147 DANIEL WEBSTER HIGHWAY
NASHUA, NH 03060
(603) 888-5050

PREPARED BY:
KEACH-NORDSTROM ASSOCIATES, INC.
10 COMMERCE PARK NORTH, SUITE 3B
BEDFORD, NEW HAMPSHIRE 03110
(603) 627-2881



KNA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 627-2881

JUNE 22, 2020

PROJECT NO. 17-1011-1

| SHEET TITLE | SHEET No. |
|---------------------------|-----------|
| EXISTING CONDITIONS PLAN | 1 |
| REMOVALS PLAN | 2 |
| NON-RESIDENTIAL SITE PLAN | 3 |
| GRADING & DRAINAGE PLAN | 4 |
| UTILITY PLAN | 5 |
| EROSION CONTROL PLAN | 6 |
| LANDSCAPE PLAN | 7 |
| LIGHTING PLAN | 8 |
| ROADWAY PLAN & PROFILE | 9 |
| SEWER PROFILE | 10 |
| CONSTRUCTION DETAILS | 11 - 17 |

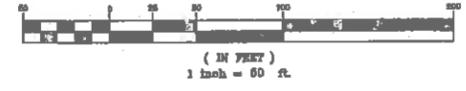
NOTES:

1. ALL STUMPS, ROOTS, BRANCHES, BRUSH, WOODS, AND OTHER PERISHABLE MATERIAL RESULTING FROM THE CLEARING AND GRUBBING OPERATIONS SHALL BE DISPOSED OF BY AN APPROVED METHOD.
2. STRIP, STOCKPILE, AND REUSE ON-SITE GRAVEL AND FILL AREAS WHERE APPROPRIATE IN ACCORDANCE WITH THE RECOMMENDATIONS OF THE DESIGN ENGINEER.
3. REMOVE ALL ASPHALT, CURBING, CONCRETE, VEGETATION, TREES, SHRUBS, LIGHT POLES, SIGNAGE, AND STRUCTURES WITHIN THE HATCHED AREA, UNLESS OTHERWISE NOTED.
4. DEBRIS REMOVED FROM THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.
5. ALL WORK PERFORMED ON BEHALF OF THIS PROJECT SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CITY OF NASHUA'S CONSTRUCTION STANDARDS AND DETAILS, LATEST EDITION.
6. THE CONTRACTOR SHALL APPLY FOR AN EXCAVATION PERMIT FOR WORK WITHIN THE CITY RIGHT-OF-WAY OR ON CITY OWNED PROPERTY. CONTACT THE CITY OF NASHUA'S ENGINEERING SERVICES DIVISION PRIOR TO CONSTRUCTION TO APPLY FOR THE PERMIT.
7. THE CONTRACTOR SHALL APPLY FOR A DRIVEWAY PERMIT TO REPAIR, WIDEN, RECONSTRUCT, OR CONSTRUCT A DRIVEWAY.
8. THE CONTRACTOR SHALL REQUEST A PRECONSTRUCTION MEETING WITH ENGINEERING SERVICES TO DISCUSS SITE INSPECTIONS, SCHEDULES, SPECIAL CONDITIONS, ETC.
9. SITE CONTRACTOR SHALL ESTABLISH TEMPORARY PERIMETER CONTROLS PRIOR TO THE START OF SITE EXCAVATION.
10. CONTRACTOR SHALL WORK WITH LOCAL UTILITY PROVIDERS DURING SHUT DOWN AND REMOVAL EFFORTS.
11. ALL ITEMS TO REMAIN SHALL BE PROTECTED BY THE CONTRACTOR.

LEGEND

- SB-F STONE BOUND FOUND
- IPN-F IRON PIN FOUND
- IPP-F IRON PIPE FOUND
- ⊕ UTILITY POLE SIGN
- ⊙ LIGHT
- ⊙ GAS VALVE
- ⊙ WATER VALVE
- ⊙ HYDRANT
- ⊙ WATER SHUT OFF
- ⊙ SEWER MANHOLE
- ⊙ DRAINAGE MANHOLE
- ⊙ CATCH BASIN
- ⊙ FLARED END SECTION
- ⊙ WELL
- ABUTTER LINE
- PROPERTY LINE
- WETLAND
- CHAIN LINK FENCE
- OHU OVERHEAD UTILITIES
- GAS LINE
- WATER LINE
- SEWER LINE
- DRAINAGE LINE
- TREELINE
- STONE WALL
- EOP EDGE OF PAVEMENT
- EOC BITUMINOUS CONCRETE CURB
- VGC VERTICAL GRANITE CURB
- STONE WALL
- BUILDING SETBACK
- EASEMENT
- ZONE LINE
- SAWCUT LINE
- ▨ REMOVALS

GRAPHIC SCALE



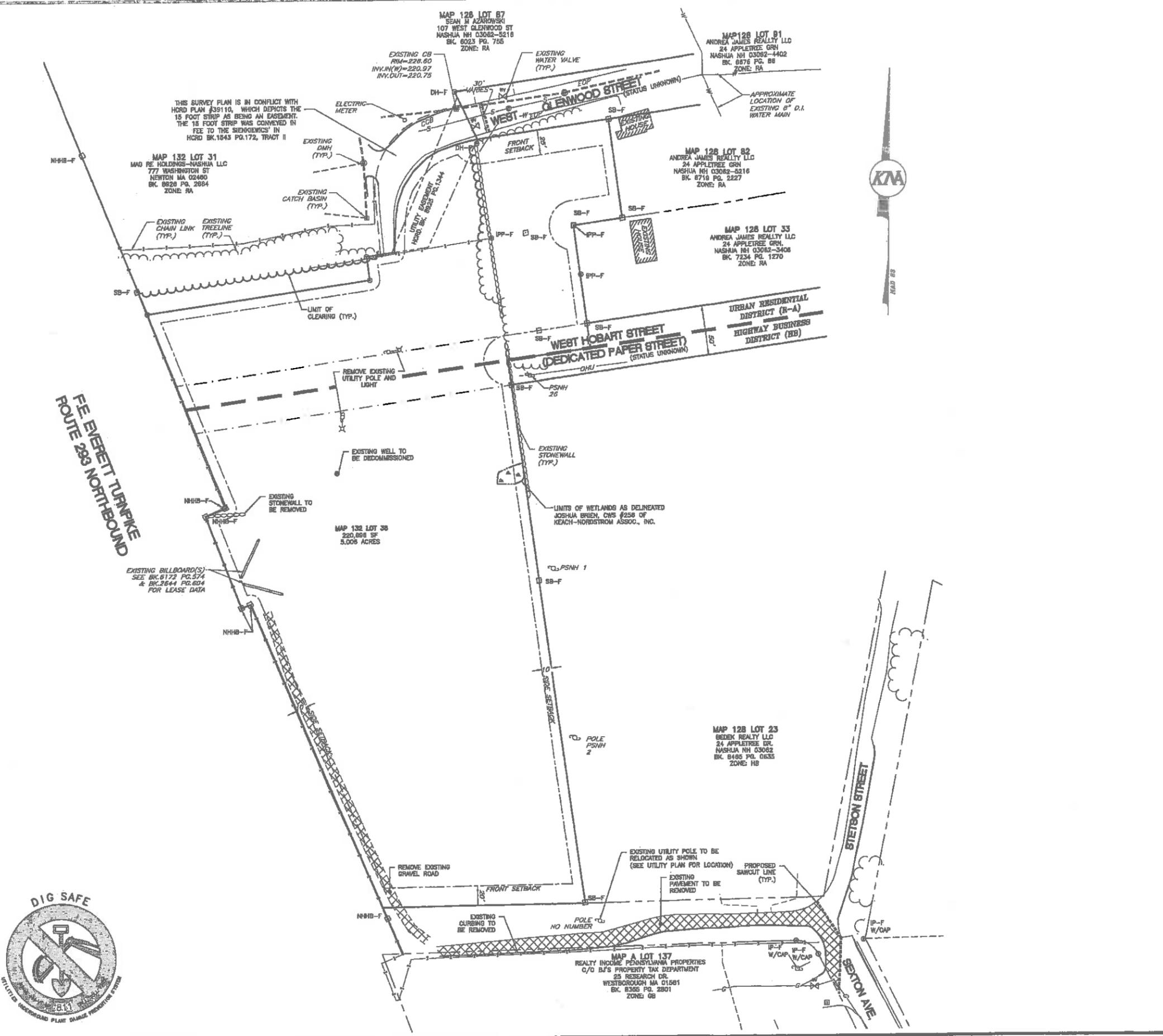
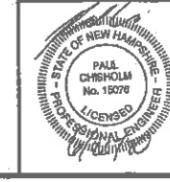
REMOVALS PLAN
AUTO BODY SHOP
 MAP 128 LOTS 31, 32 & 84
 MAP 132 LOTS 38 & 84
 WEST GLENWOOD STREET
 NASHUA, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

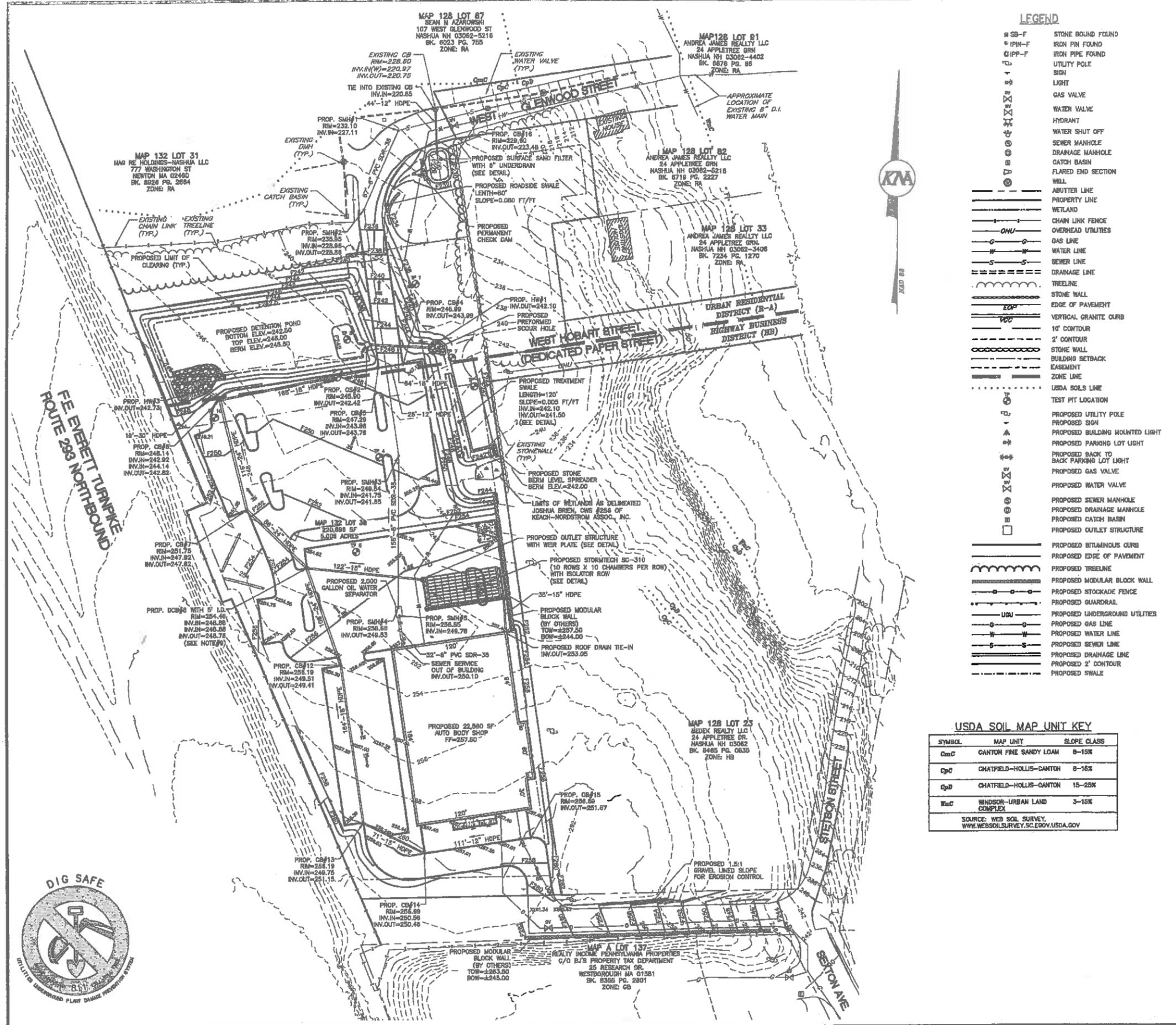
OWNER/APPLICANT:
 ROSCOMMON INVESTMENTS, LLC
 147 DANIEL WEBSTER HIGHWAY
 NASHUA, NH 03060
 (603) 888-5050

KMA
KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 2B, Bedford, NH 03110 Phone (603) 627-8884

| REVISIONS | | | |
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| No. | DATE | DESCRIPTION | BY |
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DATE: JUNE 22, 2020 SCALE: 1"=50'
 PROJECT NO: 17-1011-1 SHEET 2 OF 17





LEGEND

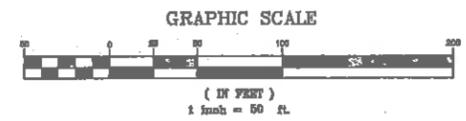
- CS-F STONE BOUND FOUND
- IPIN-F IRON PIN FOUND
- IPFF-F IRON PIPE FOUND
- UP UTILITY POLE
- SIGN SIGN
- LIGHT LIGHT
- GV GAS VALVE
- WV WATER VALVE
- HYDRANT HYDRANT
- WSO WATER SHUT OFF
- SM SEWER MANHOLE
- DM DRAINAGE MANHOLE
- CB CATCH BASIN
- FES FLARED END SECTION
- WELL WELL
- AL ABUTTER LINE
- PL PROPERTY LINE
- WETLAND WETLAND
- CHU CHAIN LINK FENCE
- OU OVERHEAD UTILITIES
- GL GAS LINE
- WL WATER LINE
- SL SEWER LINE
- DL DRAINAGE LINE
- TL TREELINE
- SW STONE WALL
- EP EDGE OF PAVEMENT
- VGC VERTICAL GRANITE CURB
- C10 10' CONTOUR
- C2 2' CONTOUR
- SW STONE WALL
- BS BUILDING SETBACK
- EASEMENT EASEMENT
- ZONE LINE ZONE LINE
- USDA USDA SOILS LINE
- TP TEST PIT LOCATION
- PU PROPOSED UTILITY POLE
- PS PROPOSED SIGN
- PML PROPOSED BUILDING MOUNTED LIGHT
- PLP PROPOSED PARKING LOT LIGHT
- PBL PROPOSED BACK TO BACK PARKING LOT LIGHT
- PVG PROPOSED GAS VALVE
- PVV PROPOSED WATER VALVE
- PSM PROPOSED SEWER MANHOLE
- PDH PROPOSED DRAINAGE MANHOLE
- PBC PROPOSED CATCH BASIN
- POS PROPOSED OUTLET STRUCTURE
- PBC PROPOSED BITUMINOUS CURB
- PEP PROPOSED EDGE OF PAVEMENT
- PTL PROPOSED TREELINE
- PMB PROPOSED MODULAR BLOCK WALL
- PSF PROPOSED STOCKADE FENCE
- PGD PROPOSED GUARDRAIL
- UGU PROPOSED UNDERGROUND UTILITIES
- GL PROPOSED GAS LINE
- WL PROPOSED WATER LINE
- SL PROPOSED SEWER LINE
- DL PROPOSED DRAINAGE LINE
- C2 PROPOSED 2' CONTOUR
- SW PROPOSED SWALE

- ### CONSTRUCTION NOTES:
- THE PURPOSE OF THIS PLAN IS TO SHOW THE PROPOSED GRADING AND DRAINAGE SYSTEMS FOR THIS SITE.
 - ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF NASHUA, AND SHALL BE BUILT IN A WORKMANLIKE MANNER IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ALL WORK PERFORMED IN THE NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION RIGHT-OF-WAY SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE, DEPARTMENT OF TRANSPORTATION, APPROVED AND ADOPTED 2016 ARE HEREBY INCORPORATED BY REFERENCE.
 - CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS FOR ROAD CONSTRUCTION, PUBLIC WORKS DEPARTMENT, NASHUA, NEW HAMPSHIRE. ALL DRAINAGE PIPES SHOWN SHALL BE HDPE. CATCH BASINS SHALL BE TYPE B, AND HAVE 3' SLOPS UNLESS OTHERWISE NOTED.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION, AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "DIG SAFE" AT 811 AT LEAST 72 HOURS BEFORE DIGGING.
 - ALL DRAINAGE PIPE SHALL BE INSTALLED FOLLOWING MANUFACTURER'S INSTALLATION INSTRUCTIONS.
 - ALL WATER UTILITIES SHALL CONFORM TO PENNSACQUA WATER WORKS REGULATIONS.
 - THE WATER, SANITARY SEWER, AND ELECTRICAL UTILITIES SHOWN HERE SHALL BE COORDINATED WITH THE FINAL BUILDING PLANS PRIOR TO CONSTRUCTION. THE DESIGN ENGINEER SHALL BE NOTIFIED OF ANY DISCREPANCIES.
 - ROOF DRAIN TIE-INS ARE SHOWN AS APPROXIMATE. THE CONTRACTOR SHOULD CONSULT WITH THE ENGINEER DURING CONSTRUCTION IF ROOF DRAIN LOCATIONS NEED TO BE MOVED.
 - ALL CATCH BASINS AND DRAIN MANHOLES SHOULD HAVE A 4 FOOT INNER DIAMETER EXCEPT FOR DOBAS, WHICH REQUIRES A 6 FOOT INNER DIAMETER.

USDA SOIL MAP UNIT KEY

| SYMBOL | MAP UNIT | SLOPE CLASS |
|--------|----------------------------|-------------|
| OmC | CANTON FINE SANDY LOAM | 0-15% |
| OpC | CHATFIELD-HOLLIS-CANTON | 0-15% |
| OpD | CHATFIELD-HOLLIS-CANTON | 15-25% |
| WaC | WINDSOR-URBAN LAND COMPLEX | 3-15% |

SOURCE: WEB SOIL SURVEY, WWW.WEBSOILSURVEY.SC.EGOV.USDA.GOV



GRADING & DRAINAGE PLAN

AUTO BODY SHOP
 MAP 128 LOTS 31, 32 & 34
 MAP 132 LOTS 38 & 34
 WEST GLENWOOD STREET
 NASHUA, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

OWNER/APPLICANT:
 ROSCOMMON INVESTMENTS, LLC
 147 DANIEL WEBSTER HIGHWAY
 NASHUA, NH 03060
 (603) 888-5050

KM KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Commerce Park North, Suite 88, Bedford, NH 03110 Phone (603) 887-8881

| REVISIONS | | | |
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| No. | DATE | DESCRIPTION | BY |
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DATE: JUNE 22, 2020 SCALE: 1"=50'
 PROJECT NO: 17-1011-1 SHEET 4 OF 17

MAP 128 LOT 87

MAP 128 LOT 81

LOAM & SEED ALL DISTURBED AREAS (TYP.)

NPDES NOTE

THIS PROJECT DISTURBS IN EXCESS OF 1-ACRE OF LAND. THEREFORE IT WILL BE REQUIRED TO OBTAIN NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT COVERAGE AS ISSUED BY THE ENVIRONMENTAL PROTECTION AGENCY (EPA). THE OWNER/DEVELOPER AND "OPERATOR" (GENERAL CONTRACTOR) SHALL EACH BE REQUIRED TO PREPARE AND SUBMIT A NOTICE OF INTENT (NOI) TO THE EPA PRIOR TO THE START OF CONSTRUCTION AND SHALL BE RESPONSIBLE FOR THE PREPARATION AND IMPLEMENTATION OF A STORM WATER POLLUTION PREVENTION PLAN (SWPPP) MEETING THE REQUIREMENTS OF THE CURRENT CONSTRUCTION GENERAL PERMIT.

EROSION CONTROL NOTES:

1. THE PURPOSE OF THIS PLAN IS TO DEPICT THE REQUIRED ON-SITE TEMPORARY CONSTRUCTION EROSION CONTROL MEASURES AS WELL AS THE PERMANENT EROSION CONTROL MEASURES.
2. ALL MEASURES IN THE PLAN SHALL MEET AS A MINIMUM THE BEST MANAGEMENT PRACTICES SET FORTH IN VOLUME 3 OF THE NEW HAMPSHIRE STORMWATER MANUAL TITLED "EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION," DATED DECEMBER 2010, AS AMENDED FROM TIME TO TIME.
3. WHENEVER PRACTICAL, NATURAL VEGETATION SHALL BE RETAINED, PROTECTED OR SUPPLEMENTED. THE STRIPPING OF VEGETATION SHALL BE DONE IN A MANNER THAT MINIMIZES SOIL EROSION. APPROPRIATE EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO LAND DISTURBANCE.
4. THE AREA OF DISTURBANCE SHALL BE KEPT TO A MINIMUM. DISTURBED AREAS REMAINING IDE FOR MORE THAN 30 DAYS SHALL BE STABILIZED.
5. MEASURES SHALL BE TAKEN TO CONTROL EROSION WITHIN THE PROJECT AREA. SEDIMENT IN RUNOFF WATER SHALL BE TRAPPED AND RETAINED WITHIN THE PROJECT AREA USING APPROVED MEASURES. WETLAND AREAS AND SURFACE WATERS SHALL BE PROTECTED FROM SEDIMENT.
6. OFF-SITE SURFACE WATER AND RUNOFF FROM UNDISTURBED AREAS SHALL BE DIVERTED AWAY FROM DISTURBED AREAS WHERE FEASIBLE OR CARRIED NON-EROSIVELY THROUGH THE PROJECT AREA. INTEGRITY OF DOWNSTREAM DRAINAGE SYSTEMS SHALL BE MAINTAINED.
7. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE MAINTAINED IN FUNCTIONING CONDITION UNTIL FINAL SITE STABILIZATION IS ACCOMPLISHED.
8. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED AFTER FINAL SITE STABILIZATION. TRAPPED SEDIMENT AND OTHER DISTURBED SOIL AREAS RESULTING FROM THE REMOVAL OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED WITHIN 30 DAYS UNLESS CONDITIONS DICTATE OTHERWISE.
9. THE CITY OF NASHUA SHALL RESERVE THE RIGHT TO REQUIRE FURTHER EROSION CONTROL PRACTICES DURING CONSTRUCTION SHOULD THEY FIND IT NECESSARY.

LEGEND

- SB-F STONE BOUND FOUND
- IPN-F IRON PIN FOUND
- IPP-F IRON PIPE FOUND
- ⊥ UTILITY POLE
- ⊥ SIGN
- ⊥ LIGHT
- ⊥ GAS VALVE
- ⊥ WATER VALVE
- ⊥ HYDRANT
- ⊥ WATER SHUT OFF
- ⊥ SEWER MANHOLE
- ⊥ DRAINAGE MANHOLE
- ⊥ CATCH BASIN
- ⊥ FLARED END SECTION
- ⊥ WELL
- ABUTTER LINE
- PROPERTY LINE
- WETLAND
- CHAIN LINK FENCE
- OVERHEAD UTILITIES
- TREELINE
- EOP
- EDGE OF PAVEMENT
- STONE WALL
- BUILDING SETBACK
- EASEMENT
- ZONE LINE
- ⊥ PROPOSED UTILITY POLE
- ⊥ PROPOSED SIGN
- ⊥ PROPOSED BUILDING MOUNTED LIGHT
- ⊥ PROPOSED PARKING LOT LIGHT
- ⊥ PROPOSED BACK TO BACK PARKING LOT LIGHT
- ⊥ PROPOSED GAS VALVE
- ⊥ PROPOSED WATER VALVE
- ⊥ PROPOSED SEWER MANHOLE
- ⊥ PROPOSED DRAINAGE MANHOLE
- ⊥ PROPOSED CATCH BASIN
- ⊥ PROPOSED OUTLET STRUCTURE
- PROPOSED BITUMINOUS CURB
- PROPOSED EDGE OF PAVEMENT
- PROPOSED TREELINE
- PROPOSED MODULAR BLOCK WALL
- PROPOSED STOCKADE FENCE
- PROPOSED GUARDRAIL

EROSION & SEDIMENT CONTROL LEGEND

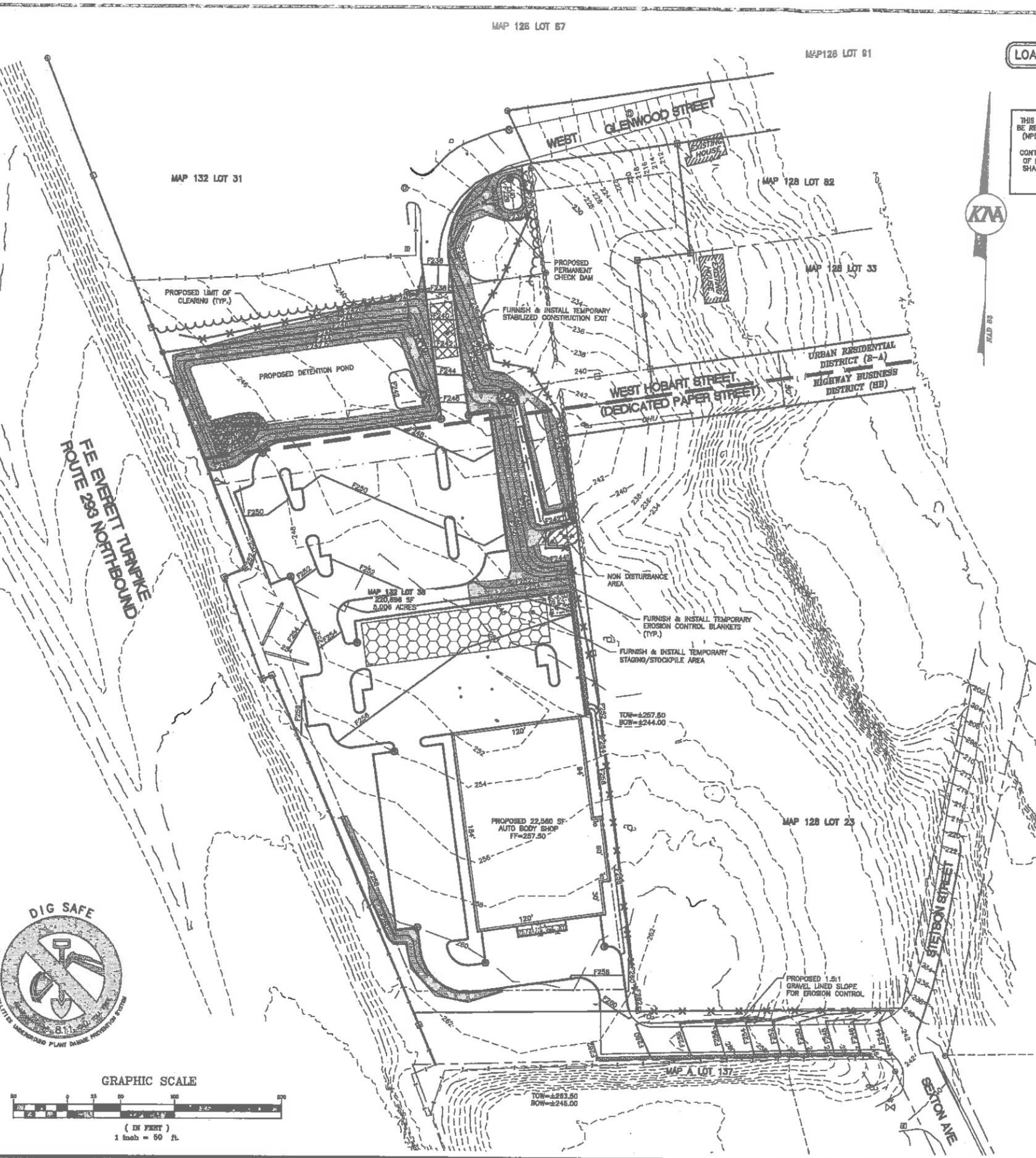
- ▨ PERMANENT OUTLET PROTECTION APRON (RP RAP)
- TEMPORARY SEDIMENT BARRIERS AT ALL CATCH BASINS
- PERMIETER CONTROL
- PERMANENT STONE CHECK DAM
- LIMITS OF CLEARING
- ▨ STABILIZED CONSTRUCTION EXIT
- ▨ STAGING AND STOCKPILE AREA
- ▨ EROSION CONTROL BLANKETS
- ▨ NON DISTURBANCE AREA



GRAPHIC SCALE



(IN FEET)
1 inch = 50 ft.



EROSION CONTROL PLAN
AUTO BODY SHOP
MAP 128 LOTS 31, 32 & 84
MAP 132 LOTS 38 & 84
WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

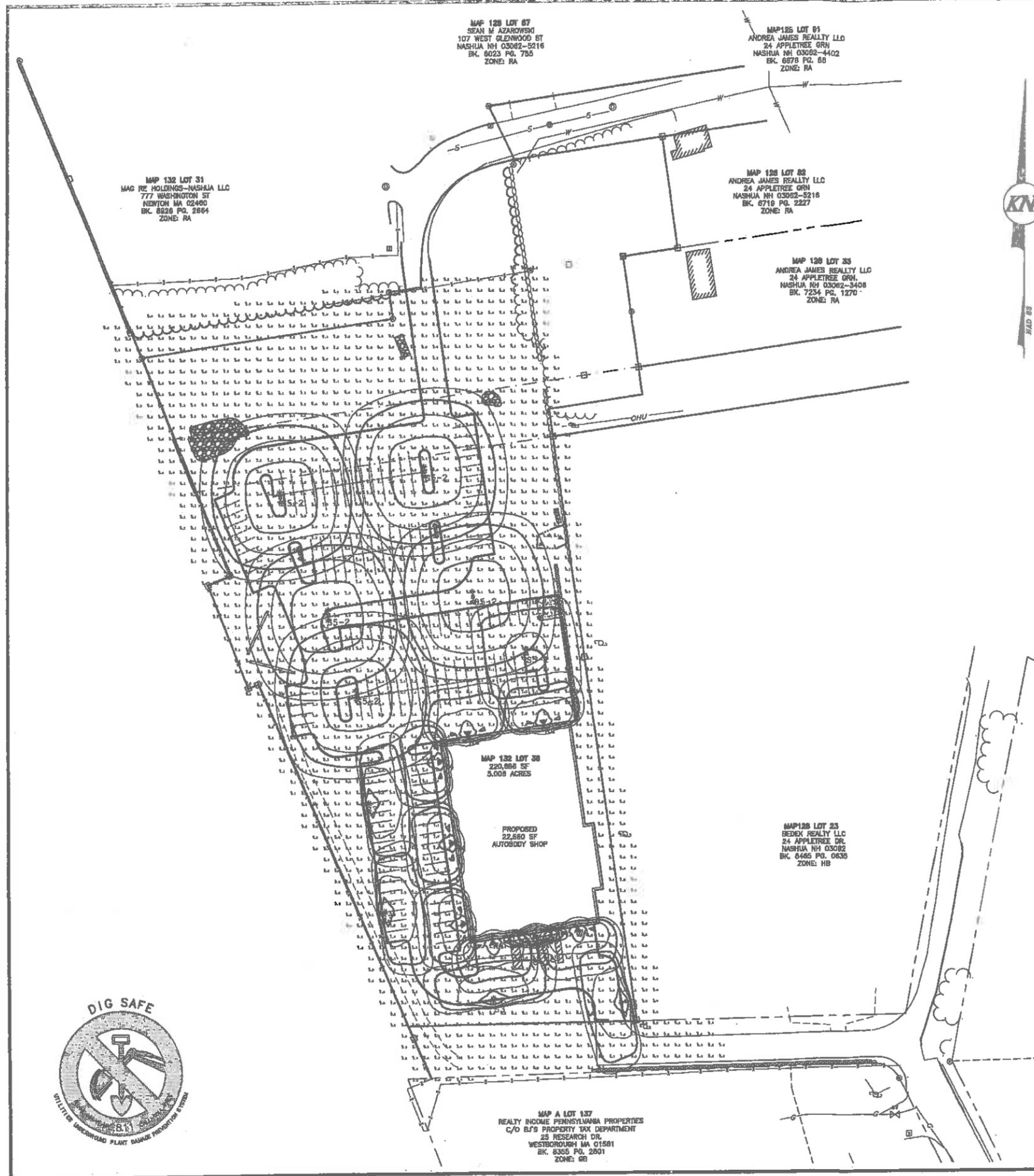
OWNER/APPLICANT:
ROSCOMMON INVESTMENTS, LLC
147 DANIEL WEBSTER HIGHWAY
NASHUA, NH 03060
(603) 888-5050

KMA
KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 08, Bedford, NH 03110 Phone (603) 487-8881



| REVISIONS | | |
|-----------|------|-------------|
| No. | DATE | DESCRIPTION |
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| | | |

DATE: JUNE 22, 2020 SCALE: 1"=50'
PROJECT NO: 17-1011-1 SHEET 6 OF 17



REVISIONS

| No. | DATE | DESCRIPTION | BY |
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COMMENTS

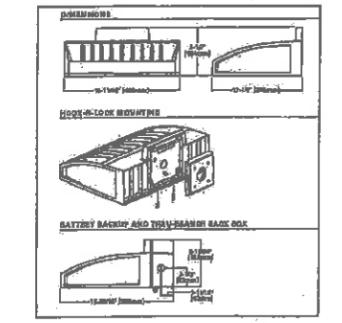
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|--------|-----|-------|-------------|--|
| ☐ | 4 | S3 | SINGLE | GLEON-AF-01-LED-E1-SL3-HSV/8884208FN (20' AF8) |
| ☐ | 1 | S3-1 | SINGLE | GLEON-AF-01-LED-E1-4MCV/8884208FN (20' AF8) |
| ☐ | 5 | S3-2 | BACK-2-BACK | GLEON-AF-02-LED-E1-4MCV/8884208FN (20' AF8) |
| ◀ | 1 | W1 | SINGLE | MERU-LED-ACEN-08-01 / WALL MTD (14' AF8) |
| ◀ | 7 | W6 | SINGLE | GWC-AF-01-LED-E1-SL-4800 WALL MTD (14' AF8) |

DRAWING PATTERN

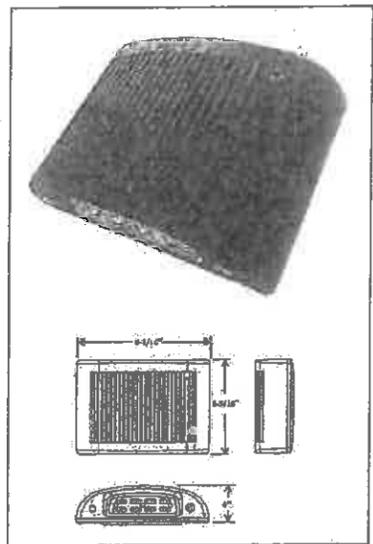
| Symbol | Qty | Label | Arrangement | Description |
|--------|-----|-------|-------------|-------------|
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- LIGHTING NOTES:**
1. ALL LIGHTS/FIXTURES SHALL BE AS SPECIFIED BY CHARRON LIGHTING.
 2. ALL PROPOSED LIGHTS/FIXTURES ARE TO BE FULL CUTOFF.
 3. FIXTURES SHALL BE MOUNTED AT HEIGHTS AS SPECIFIED IN TABLE.
 4. PRIOR TO CONSTRUCTION, THE SITE CONTRACTOR SHALL COORDINATE WITH THE PROJECT ELECTRICIAN FOR THE EXACT LOCATION, LAYOUT, CONDUIT SIZE AND CIRCUITS ASSOCIATED WITH THE SITE LIGHTING.

GLEON AERIAL/SITE LUMINAIRE

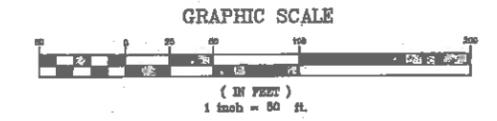


GWC WALL MOUNT LUMINAIRE



LUMINAIRE SCHEDULE

| SYMBOL | QTY | LABEL | ARRANGEMENT | DESCRIPTION |
|--------|-----|-------|-------------|--|
| ☐ | 4 | S3 | SINGLE | GLEON-AF-01-LED-E1-SL3-HSV/8884208FN (20' AF8) |
| ☐ | 1 | S3-1 | SINGLE | GLEON-AF-01-LED-E1-4MCV/8884208FN (20' AF8) |
| ☐ | 5 | S3-2 | BACK-2-BACK | GLEON-AF-02-LED-E1-4MCV/8884208FN (20' AF8) |
| ◀ | 1 | W1 | SINGLE | MERU-LED-ACEN-08-01 / WALL MTD (14' AF8) |
| ◀ | 7 | W6 | SINGLE | GWC-AF-01-LED-E1-SL-4800 WALL MTD (14' AF8) |



IN ASSOCIATION WITH:

P.O. BOX 4550
MANCHESTER, NH 03108
(603) 884-4827
FAX (603) 884-0364
SALES@CHARRONINC.COM

LIGHTING PLAN
AUTO BODY SHOP
MAP 128 LOTS 31, 32 & 84
MAP 132 LOTS 38 & 84
WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

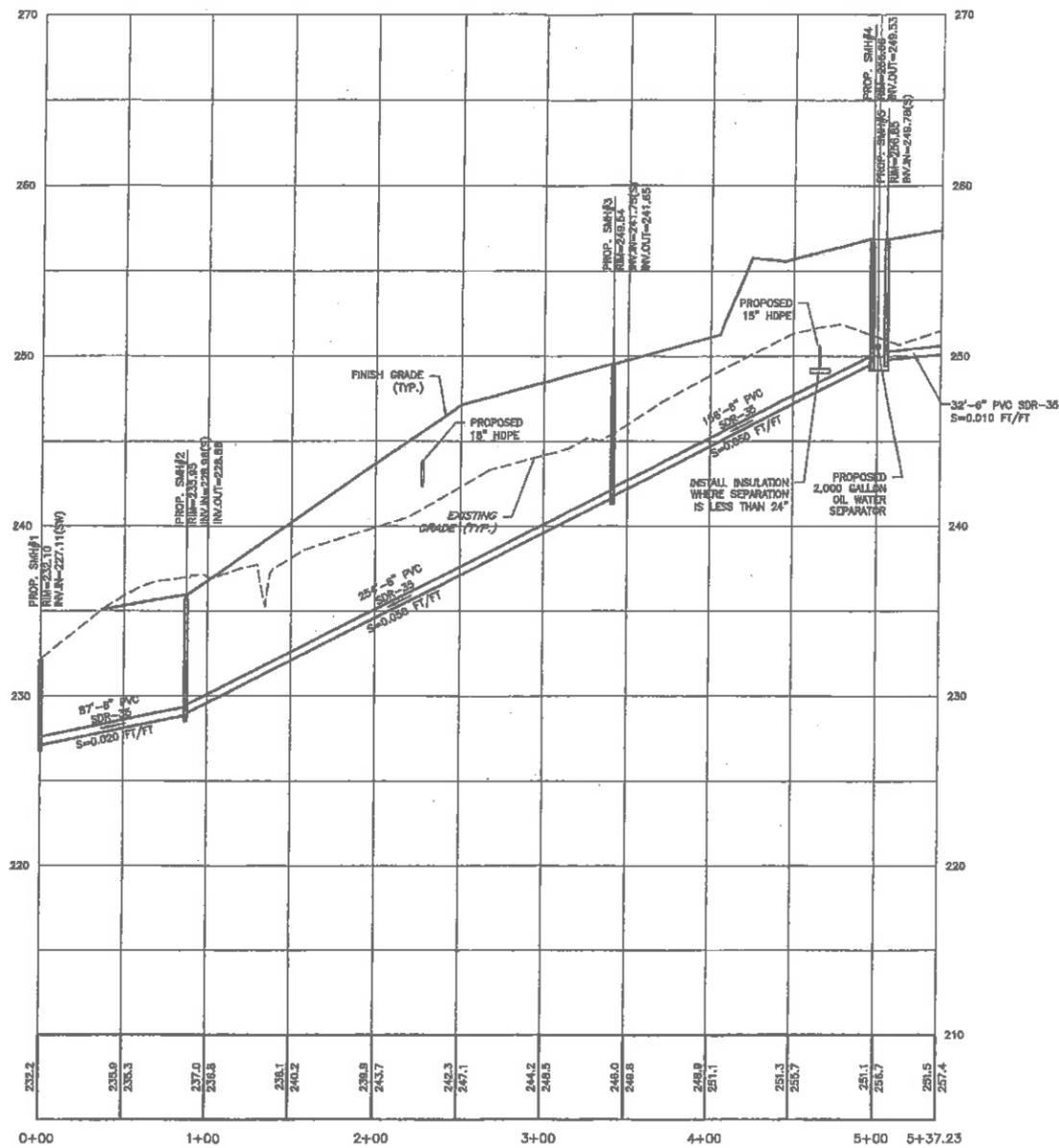
OWNER/APPLICANT:
ROSCOMMON INVESTMENTS, LLC
147 DANIEL WEBSTER HIGHWAY
NASHUA, NH 03060
(603) 888-5050

KMA
KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 3B, Bedford, NH 03110 Phone (603) 687-8861

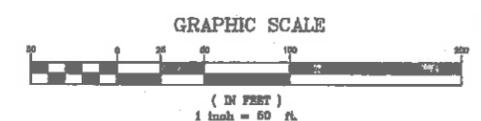
REVISIONS

| No. | DATE | DESCRIPTION | BY |
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DATE: JUNE 22, 2020 SCALE: 1"=50'
PROJECT NO: 17-1011-1 SHEET 6 OF 17



SEWER PROFILE
 SCALE: 1" = 50' (HORIZ.)
 1" = 5' (VERT.)



SEWER PROFILE
AUTO BODY SHOP
 MAP 128 LOTS 31, 32 & 84
 MAP 132 LOTS 38 & 84
 WEST GLENWOOD STREET
 NASHUA, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

OWNER/APPLICANT:
 ROSCOMMON INVESTMENTS, LLC
 147 DANIEL WEBSTER HIGHWAY
 NASHUA, NH 03080
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KMA KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
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| REVISIONS | | | |
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| No. | DATE | DESCRIPTION | BY |
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DATE: JUNE 22, 2020 SCALE: 1"=50'
 PROJECT NO: 17-1011-1 SHEET 10 OF 17



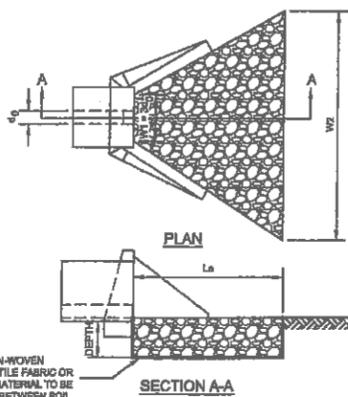
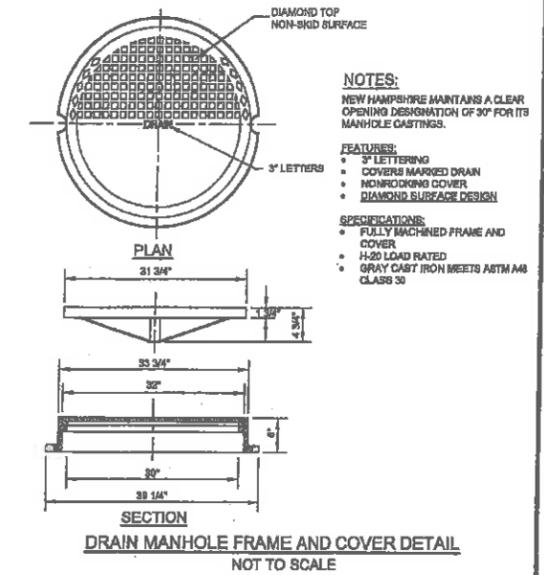
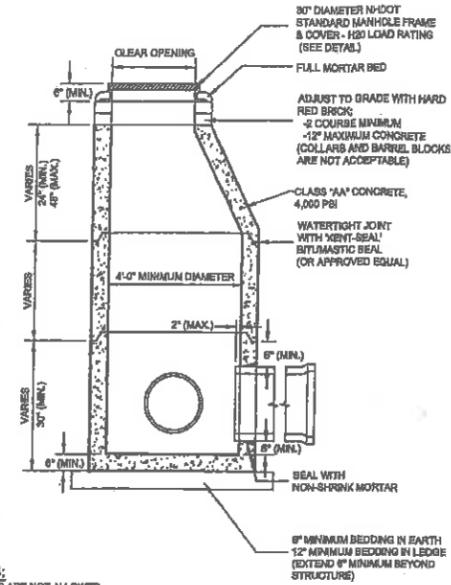
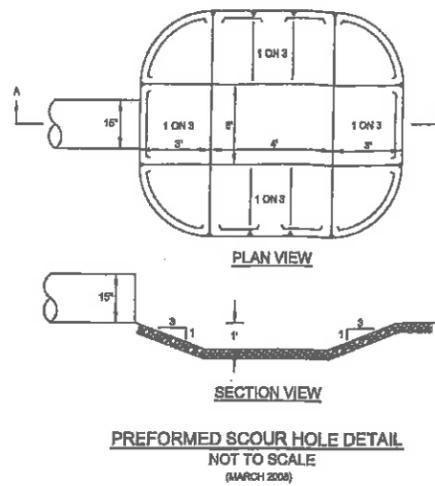
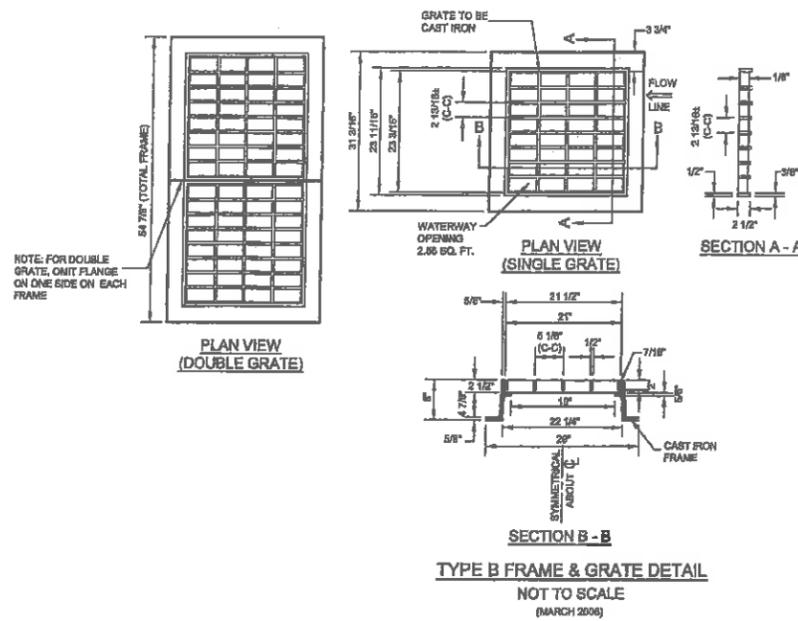


TABLE 7-24 - RECOMMENDED RIP RAP GRADATION RANGES

| PERCENT OF WEIGHT SMALLER THAN THE SIEVE SIZE | SIZE OF STONE |
|---|----------------|
| 100% | 1.5 TO 2.0 DIA |
| 80% | 1.5 TO 1.9 DIA |
| 60% | 1.0 TO 1.5 DIA |
| 16% | 0.5 TO 0.5 DIA |

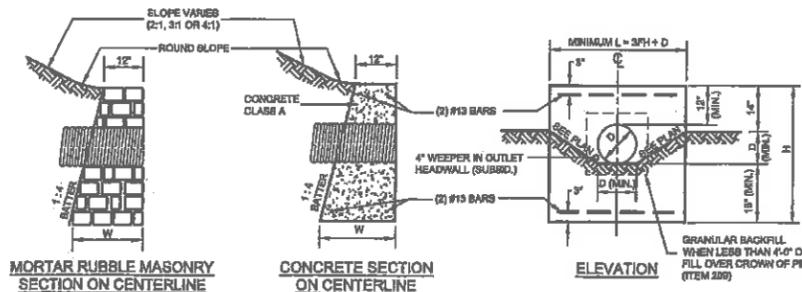
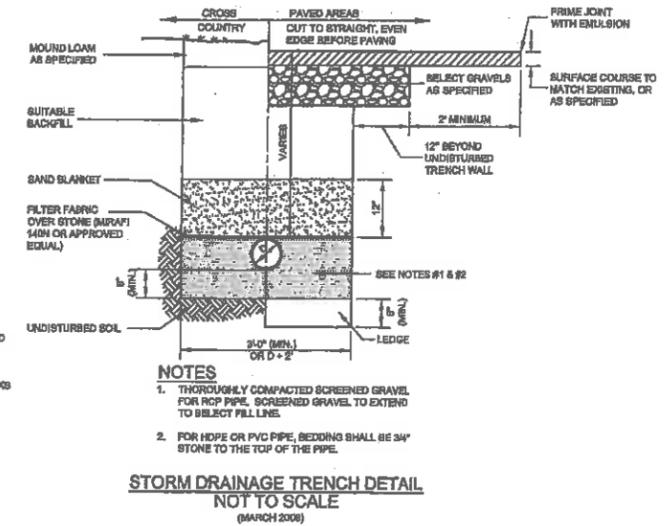
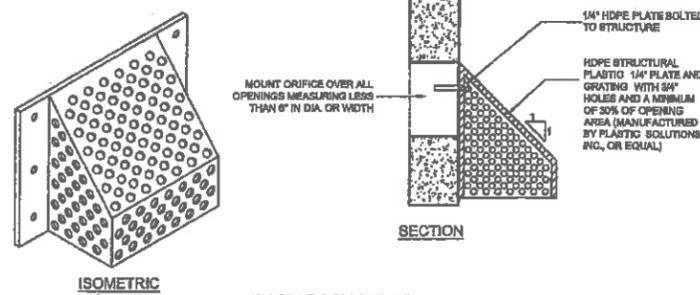
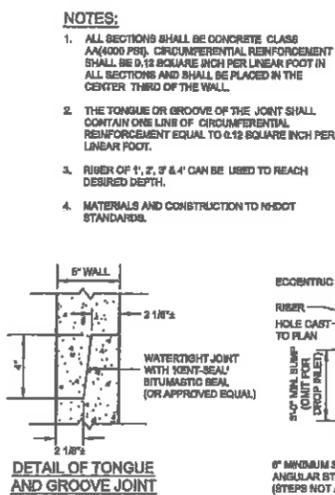
CONSTRUCTION SPECIFICATIONS:

- THE SUBGRADE FOR THE FILTER MATERIAL, GEOTEXTILE FABRIC AND RIP RAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
- FRACTURED ROCK USED FOR FILTER OR RIP RAP SHALL CONFORM TO THE SPECIFIED GRADATION.
- GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE RIP RAP. DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
- STONE FOR THE RIP RAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.

MAINTENANCE:

THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR RAIN EVENT. IF THE RIP RAP HAS BEEN DISPLACED, UNDERMINED, OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THIS CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT BROKEN IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERN AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION APRON.

| LOCATION | L ₁ | W ₁ | W ₂ | CSO | DEPTH |
|------------|----------------|----------------|----------------|-----|-------|
| PROP. HWRS | 23' | 8' | 30' | 4' | 10" |



NOTE: DIMENSIONS SHOWN ARE TO PAYMENT LINES. MORTAR RUBBLE MASONRY TO BE STEPPED OUTSIDE PAYMENT LINES ON SLOPING FACES.

| DIAMETER D (INCH) | AREA OF PIPE (SQ FT) | MASONRY PER FOOT OF WALL (CU. YD.) | MASONRY PER HOLE (CU. FT.) | MASONRY PER STANDARD HEADER (CU. YD.) | STEEL PER STANDARD HEADER (LB) | LENGTH OF BARS | PIPE EXC. 1' DEPTH (CU. YD.) | HEADER EXC. 1' DEPTH (CU. YD.) | ITEM 200 PER LINEAR FOOT | HEADER LENGTH L | HEADER HEIGHT H | FILL HEIGHT FH | WIDTH AT BOTTOM OF HEADER W | 1' HEADWALL | |
|-------------------|----------------------|------------------------------------|----------------------------|---------------------------------------|--------------------------------|----------------|------------------------------|--------------------------------|--------------------------|-----------------|-----------------|----------------|-----------------------------|--------------------------------------|--------------------------------|
| | | | | | | | | | | | | | | MASONRY IN CORNER FRUSTRUM (CU. YD.) | HEADER EXC. 1' DEPTH (CU. YD.) |
| 12" | 0.78 | 0.185 | 1.08 | 0.51 | 8 | 2'-2" | 0.111 | 0.788 | 0.30 | 3'-6" | 3'-6" | 10" | 1'10 1/2" | 0.38 | 1.067 |
| 15" | 1.23 | 0.232 | 1.73 | 0.85 | 11 | 3'-10" | 0.120 | 0.847 | 0.35 | 4'-8" | 3'-6" | 1'-1" | 1'11 1/2" | 0.31 | 1.232 |
| 18" | 1.77 | 0.292 | 2.58 | 1.13 | 14 | 5'-2" | 0.130 | 1.111 | 0.39 | 5'-8" | 4'-6" | 1'-4" | 2'-0" | 0.30 | 1.408 |
| 24" | 3.14 | 0.280 | 4.71 | 1.78 | 20 | 7'-2" | 0.148 | 1.651 | 0.48 | 7'-6" | 6'-4" | 1'-10" | 2'-1 1/2" | 0.42 | 1.778 |
| 30" | 4.51 | 0.301 | 7.87 | 2.58 | 26 | 9'-2" | 0.165 | 1.910 | 0.55 | 9'-6" | 8'-0" | 2'-4" | 2'-3" | 0.51 | 2.164 |

MORTAR RUBBLE MASONRY AND CONCRETE HEADWALLS
NOT TO SCALE
(MARCH 2006)

CONSTRUCTION DETAILS
AUTO BODY SHOP
MAP 128 LOTS 31, 32 & 84
MAP 132 LOTS 38 & 84
WEST GLENWOOD STREET
NASHUA, NEW HAMPSHIRE
HILLSBOROUGH COUNTY

OWNER/APPLICANT:
ROSCOMMON INVESTMENTS, LLC
147 DANIEL WEBSTER HIGHWAY
NASHUA, NH 03060
(603) 888-5050

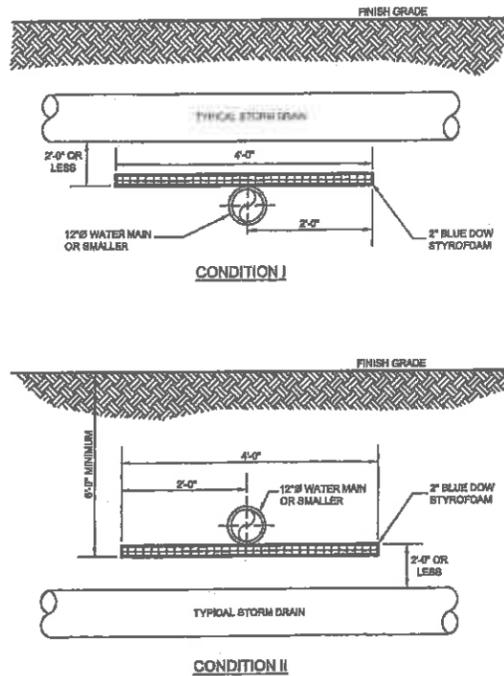
KMA KEACH-NORDSTROM ASSOCIATES, INC.
Civil Engineering Land Surveying Landscape Architecture
10 Commerce Park North, Suite 33, Bedford, NH 08116 Phone (603) 887-2884



REVISIONS

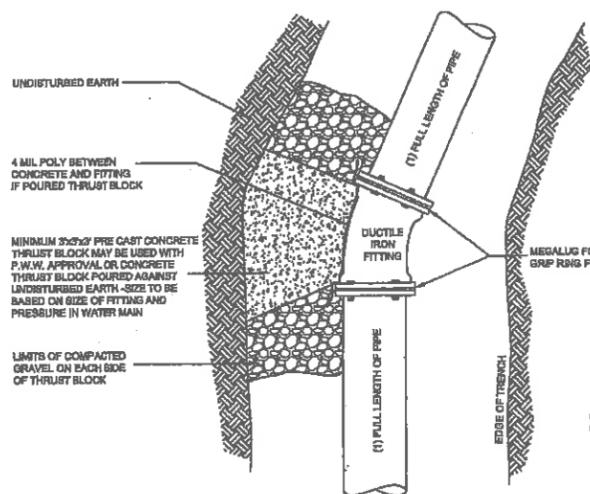
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DATE: JUNE 22, 2020 SCALE: AS NOTED
PROJECT NO: 17-1011-1 SHEET 12 OF 17



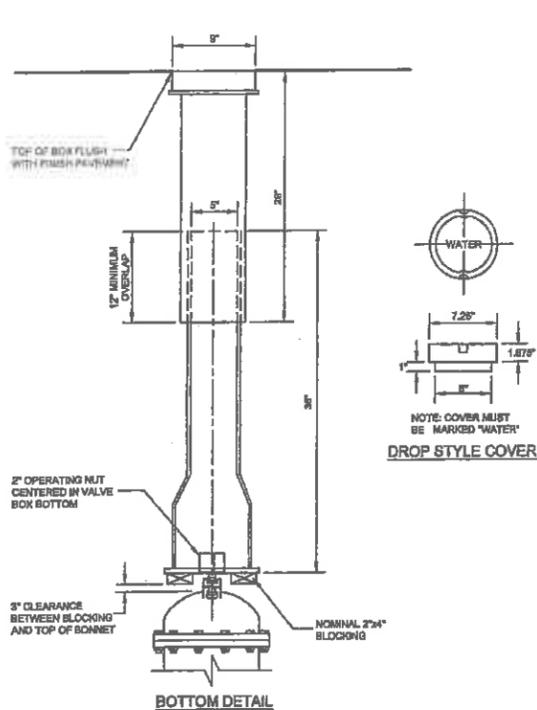
- NOTES:**
1. PENNICHUCK WATER WORKS, INC. RESERVES THE RIGHT TO MODIFY INSULATION REQUIREMENTS AS NECESSARY BASED ON FIELD CONDITIONS, ETC.
 2. THE LENGTH OR WIDTH OF INSULATION SHALL EXTEND 1' STORM DRAIN PIPE DIAMETER BEYOND THE EDGE OF STORM DRAIN PIPE IN EACH DIRECTION OR A MINIMUM OF 2' BEYOND THE CENTERLINE OF THE STORM DRAIN PIPE, WHICHEVER IS GREATER.
 3. ALL BUTT JOINT BEAMS TO BE OVERLAPPED WITH A 1" PIECE OF INSULATION CENTERED OVER BEAM.

STORM DRAIN/WATER MAIN INTERSECTION RUNS - ELEVATION VIEW (A-18) NOT TO SCALE



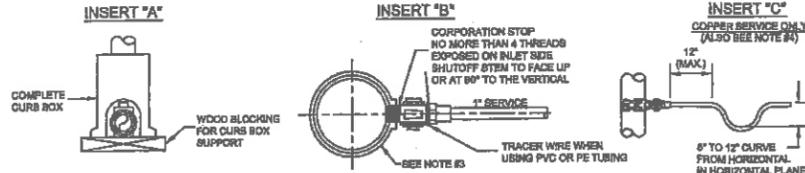
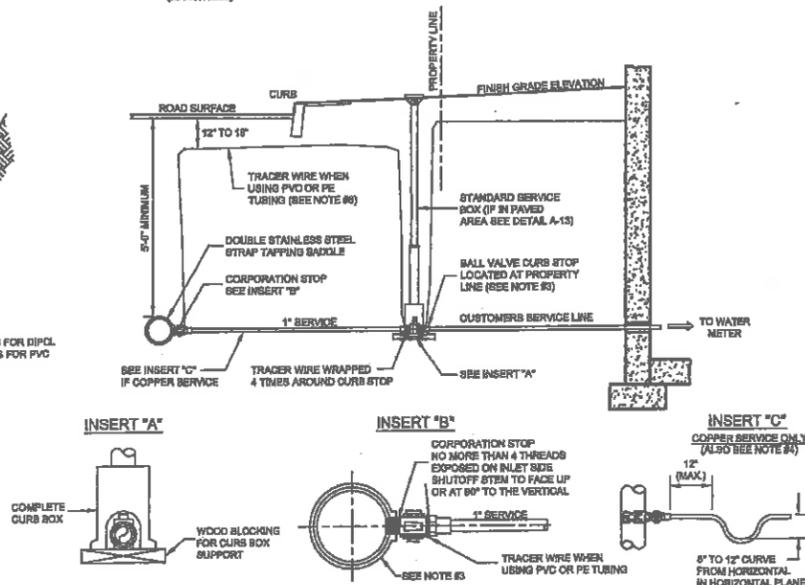
- NOTES:**
1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO PENNICHUCK WATER WORKS, INC. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.
 3. 3/4" S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS.
 4. MIN 3x3x3 PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH PENNICHUCK WATER WORKS, INC. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN.

THRUST BLOCK BEHIND FITTINGS INSTALLATION (A-07) NOT TO SCALE (MARCH 2008)



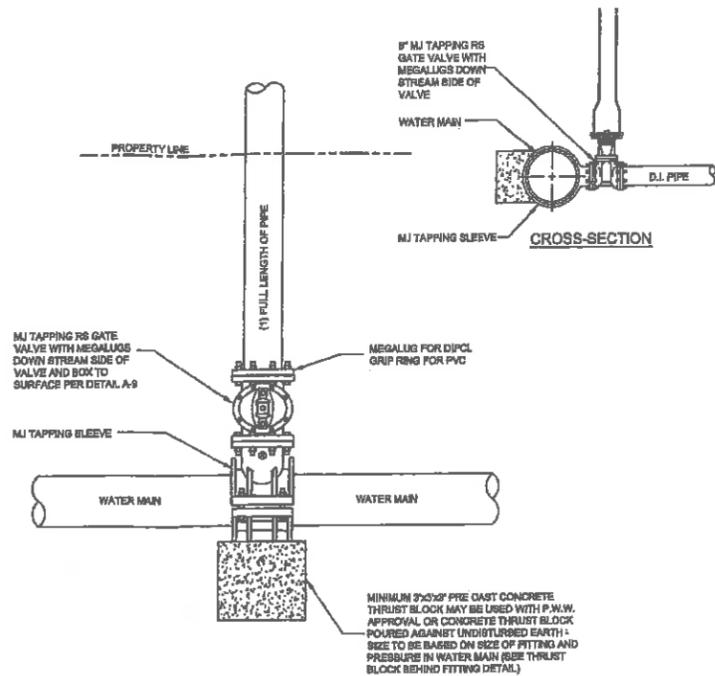
- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO PENNICHUCK WATER WORKS, INC. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.

VALVE BOX DETAIL (A-09) NOT TO SCALE (MARCH 2008)



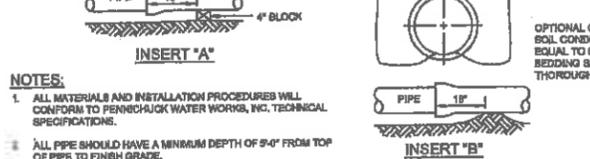
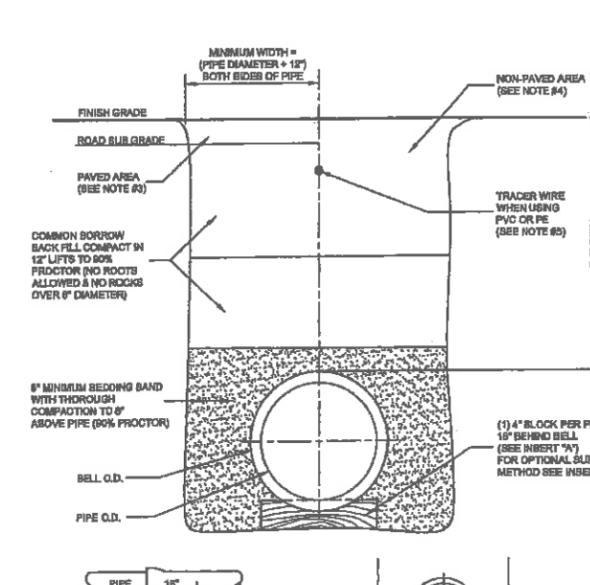
- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO PENNICHUCK WATER WORKS, INC. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.
 3. IF WATER MAIN IS PVC OR TRANSITE, A DOUBLE STAINLESS STEEL STRAP TAPPING SADDLE MUST BE USED TO CONNECT THE CORPORATION TO THE WATER MAIN.
 4. IF WATER MAIN IS PVC OR TRANSITE, AND THE NEW WATER SERVICE IS COPPER THEN SEE DETAIL A-18.
 5. IF WATER MAIN IS A FIRE SERVICE, THEN SEE DETAIL A-24.
 6. 10 GAUGE TRACER WIRE AS MANUFACTURED BY BMS, DIVISION OF ALBERTAR CORP., AVON, MA OR EQUIVALENT.

1" SERVICE AND VALVE BOX INSTALLATION DETAIL (A-20) NOT TO SCALE (MARCH 2008)



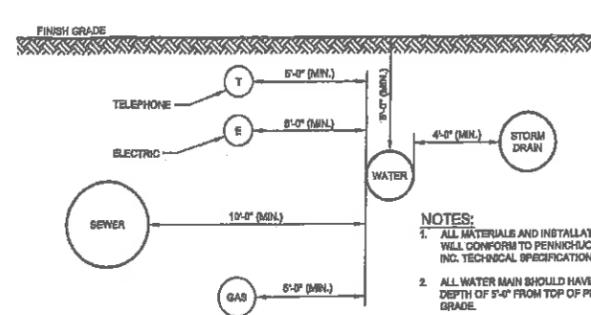
- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO PENNICHUCK WATER WORKS, INC. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.

LARGE SERVICE AND/OR TAPPING SLEEVE DETAIL (A-21) NOT TO SCALE (MARCH 2008)



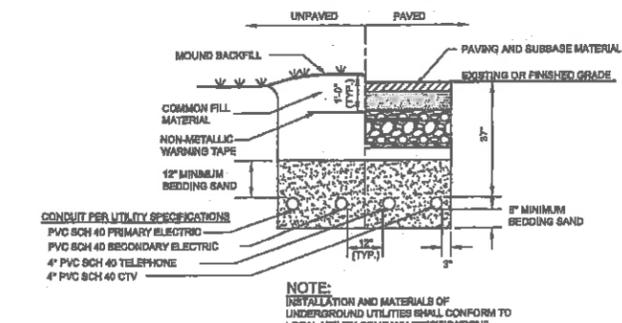
- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO PENNICHUCK WATER WORKS, INC. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.
 3. REQUIREMENTS FOR SUBBASE AND BASE MATERIAL TYPE ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN PAVED AREAS.
 4. REQUIREMENTS FOR GRAVEL, LOAM AND/OR SEED ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN NON-PAVED AREAS.
 5. 18 GAUGE TRACER WIRE AS MANUFACTURED BY BMS, DIVISION OF ALBERTAR CORP., AVON, MA OR EQUIVALENT.

TRENCH DETAIL (A-02) NOT TO SCALE (MARCH 2008)



- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO PENNICHUCK WATER WORKS, INC. TECHNICAL SPECIFICATIONS.
 2. ALL WATER MAIN SHOULD HAVE A MINIMUM DEPTH OF 5'-0" FROM TOP OF PIPE TO FINISH GRADE.
 3. SEE DETAIL FOR TRENCH SPECIFICATIONS.
 4. SEE DETAIL FOR OUTSIDE SERVICE ENTRANCE SPECIFICATIONS.

UTILITY SEPARATION (MAIN) DETAIL (A-01) NOT TO SCALE (MARCH 2008)

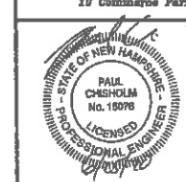


UTILITY TRENCH DETAIL (A-03) NOT TO SCALE (MARCH 2008)

CONSTRUCTION DETAILS
AUTO BODY SHOP
 MAP 128 LOTS 31, 32 & 84
 MAP 132 LOTS 38 & 84
 WEST GLENWOOD STREET
 NASHUA, NEW HAMPSHIRE
 HILLSBOROUGH COUNTY

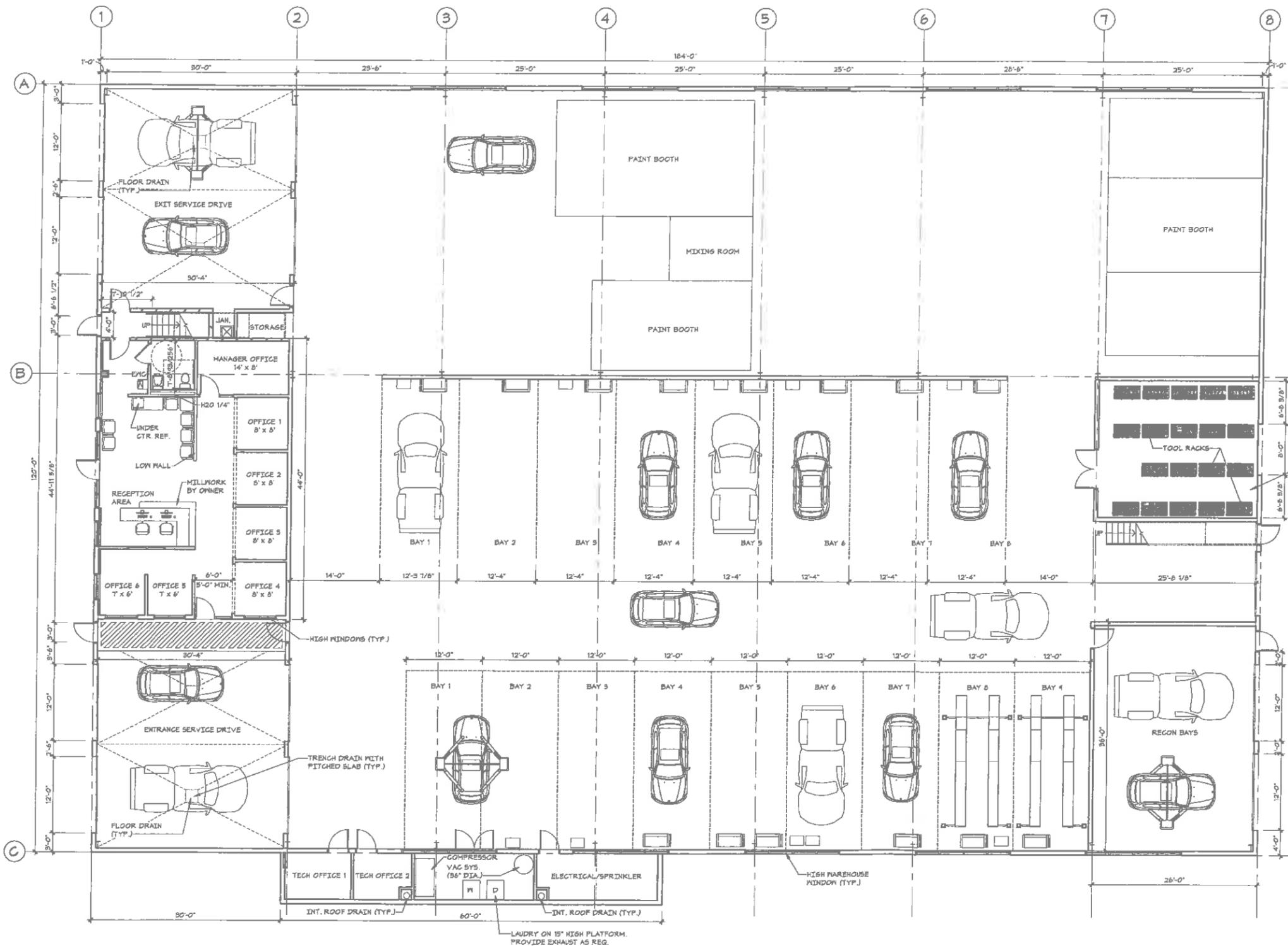
OWNER/APPLICANT:
 ROSCOMMON INVESTMENTS, LLC
 147 DANIEL WEBSTER HIGHWAY
 NASHUA, NH 03080
 (603) 888-5050

KM KEACH-NORDSTROM ASSOCIATES, INC.
 Civil Engineering Land Surveying Landscape Architecture
 10 Cottonwood Park North, Suite 205, Bedford, NH 03110 Phone (603) 887-8861

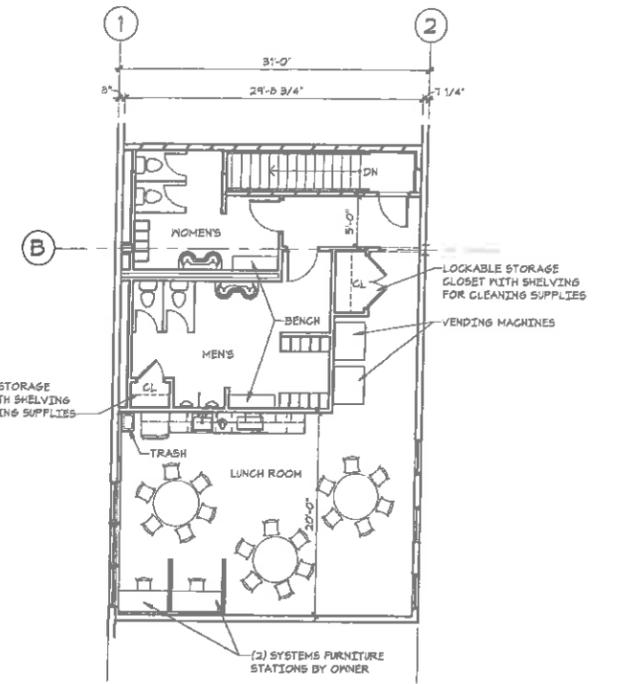


| REVISIONS | | | |
|-----------|------|-------------|----|
| No. | DATE | DESCRIPTION | BY |
| | | | |
| | | | |
| | | | |

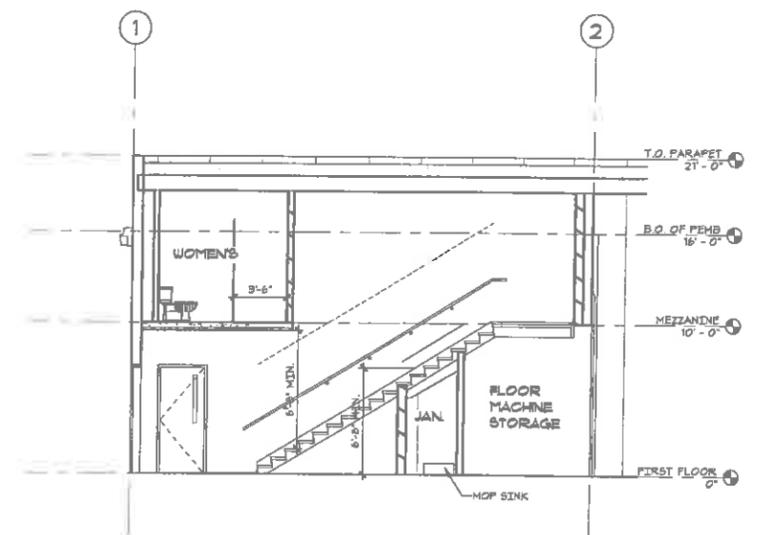
DATE: JUNE 22, 2020 SCALE: AS SHOWN
 PROJECT NO: 17-1011-1 SHEET 16 OF 17



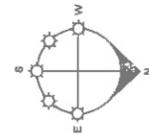
FIRST FLOOR / MEZZ. PLAN



MEZZANINE PLAN



ROUGH STAIR SECTION



TULLEY BODY SHOP

WEST GLENWOOD STREET
NASHUA, NH, 03060
8/8/22

ARCHITECTURE
LAND PLANNING
INTERIOR DESIGN
3D VISUALIZATION

833 TURNPIKE ROAD P.O. BOX 104
NEW IPSWICH NEW HAMPSHIRE 03071



McGhee, Linda

From: Rapaglia, Mark
Sent: Tuesday, July 07, 2020 4:19 PM
To: Peter Madsen
Cc: Pouliot, Adam
Subject: RE: Site Plan Checklist / Apparatus Information
Attachments: Incomplete Site West Glenwood.pdf, Site Plan Review ver 2 , 2020 rev July 2020.pdf, Fire Overlay Plan.pdf

Good afternoon Peter,

Fire Marshal Pouliot and I reviewed the apparatus movement overlay and have determined that the plan will not work for this site with the proposed width of the roadway.

With a quick glance at the site, the following are a few items missing from the submittal:

- Incomplete site plan review checklist
- Missing fire hydrant
- Amount of available water
- The roadway (Stetson Street) condition will need to be addressed
- Grade issues on the road

Without proper submittal, these are not all of the concerns

Thank you

Mark Rapaglia
Inspector/Investigator
Nashua Fire Marshal's Office
177 Lake Street
Nashua, NH 03060
(603) 589-3464

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From: Peter Madsen [mailto:pmadsen@keachnordstrom.com]
Sent: Tuesday, July 07, 2020 10:06 AM
To: Rapaglia, Mark
Subject: RE: Site Plan Checklist / Apparatus Information

CAUTION: This email came from outside of the organization. Do not click links/open attachments if source is unknown.

Mark,

Cc: Paul Chisholm; Ferguson, Moriah
Subject: RE: Site Plan Checklist / Apparatus Information

CAUTION: This email came from outside of the organization. Do not click links/open attachments if source is unknown.

Mark,

I will swing by this morning and drop off the checklist and the overlay plan. We had to make a few changes to the drive aisles because the fire engine was less maneuverable than the car carrier I had run through the site when designing it. These changes will follow through in the plan set for later submissions.

Also, the checklist we are submitting is missing a few items. However, we will be working with the Fire Department throughout the application process as we figure out more of the internals of the building so you guys will have everything you need.

Respectfully,
Pete

Peter Madsen
Project Engineer
Keach-Nordstrom Associates, Inc.
10 Commerce Park North, Ste 3
Bedford, NH 03110
t. (603)-627-2881 | f. (603)-627-2915
pmadsen@keachnordstrom.com www.keachnordstrom.com

From: Rapaglia, Mark <MarkR@nashuanh.gov>
Sent: Tuesday, June 30, 2020 12:45 PM
To: Peter Madsen <pmadsen@keachnordstrom.com>; Ferguson, Moriah <FergusonM@nashuanh.gov>
Cc: Pouliot, Adam <AdamP@nashuanh.gov>
Subject: RE: Site Plan Checklist / Apparatus Information

Good afternoon Peter,

We require a hard copy of the apparatus plan and the Site plan checklist can be emailed to us.

Thank you

Mark Rapaglia
Inspector/Investigator
Nashua Fire Marshal's Office
177 Lake Street
Nashua, NH 03060
(603) 589-3464

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Training Safety Division
Administrative Assistant II
177 Lake Street
Nashua, NH 03060
603-589-3434 Phone
603-589-3474 Fax
fergusonm@nashuanh.gov
??



Nashua Fire Rescue
 Fire Marshal's Office
 177 Lake Street, Nashua NH 03060-4402
 NashuaNH.gov

Adam Pouliot
 Fire Marshal
 (603) 589-3460
 Fax (603) 589-3474

Site Plan Review

The Nashua Fire Marshal's Office reviews all site plans to ensure that emergency vehicle access, water supply and hydrant location is in compliance with all adopted fire and life safety codes. The checklist below is the information we need to have submitted on a plan(s). Please submit to:

Nashua Fire Marshal
 177 Lake Street
 Nashua, NH 03060
 Telephone: (603) 589-3460

If you wish to make an appointment to review your plan prior to a full submittal to all city agencies please contact the Fire Marshal's Office at the number listed above.

Site Plan Location: West Glenwood St Proposed Use: Auto Body Shop

INFORMATION REQUIRED:

- Size of the building and number of stories
- Type of construction
- Use of the building, Occupancy
- Nearby structures How far W/E 1000' Type BJ's, Car lots, Homes
- Property lines
- Topography or lay of the land
- Automatic Fire Sprinklers
- Fire pump
- Nearest and any proposed new fire hydrants showing the water main location and size
- Amount of water available? Current water flow data (Within 12 months of construction) Note: The minimum required fire flow and flow duration for one and two family dwellings shall be 1000 GPM for 1 hour.
- Identify hard surface paths from each exit to the parking lot or driveways
- Apparatus movement travel path overlay on the plan
- Fire access roads (Gates or chains across the roads are not permitted)
- Will the utilities be underground or overhead
- How will building be identified during construction and after it is completed
- Submit 5 street names for review by our office for any new streets (E911 Addressing standard applies)
- Fire lanes/No parking signs (See no parking requirements)
- Is the building going to require rated exterior walls
- Number of Knox boxes required.
 - Less than 10,000 sq. ft. (1 Knox Box)*
 - 10,000 to 30,000 sq. ft. (2 Knox Boxes)*
 - 30,000 to 100,000 sq. ft. (3 Knox Boxes)*
 - 100,000+ sq. ft. (4 Knox Boxes)*
- Will there be flammable liquid storage room or shed
- Location of fuel tanks, size, type, etc.

McGhee, Linda

From: Falk, Carter
Sent: Tuesday, July 14, 2020 7:39 AM
To: McGhee, Linda
Subject: RE: Tech Review

Ya I'm good

From: McGhee, Linda
Sent: Monday, July 13, 2020 5:28 PM
To: Falk, Carter
Subject: Tech Review

Carter,

I saw the comments you had for 32 Groton Road. Are you all set with the lot line relocation/consolidation plan on West Glenwood St?

Thanks,
Linda

*Linda McGhee
Deputy Planning Manager
Community Development Division
229 Main Street/PO Box 2019
Nashua, NH 03061*

Traffic Impact Report (TIR) Threshold Worksheet

Complete this form to determine if your project requires a Traffic Impact Report, as per City Code, Section

Project Name: Tulley Auto Body Shop

Type of Development: Automotive Vehicle Body Shop

Applicant: Roscommon Investments, LLC Owner Agent

Location: Map 132 Lot 38

Address: West Glenwood Street Phone Number: _____

Roadway(s) Where Site Access Drives Shall Be Located: West Glenwood Street
Stetson Street

RESIDENTIAL DEVELOPMENT

| Anticipated Land Use | Acreage to be Developed | Number of Units |
|----------------------|-------------------------|-----------------|
| | | |

CBD NON-CBD

Development Peak Hour and Maximum Number of Generated Trips:

Trip Rate Source

TTE Code: _____

Other: _____

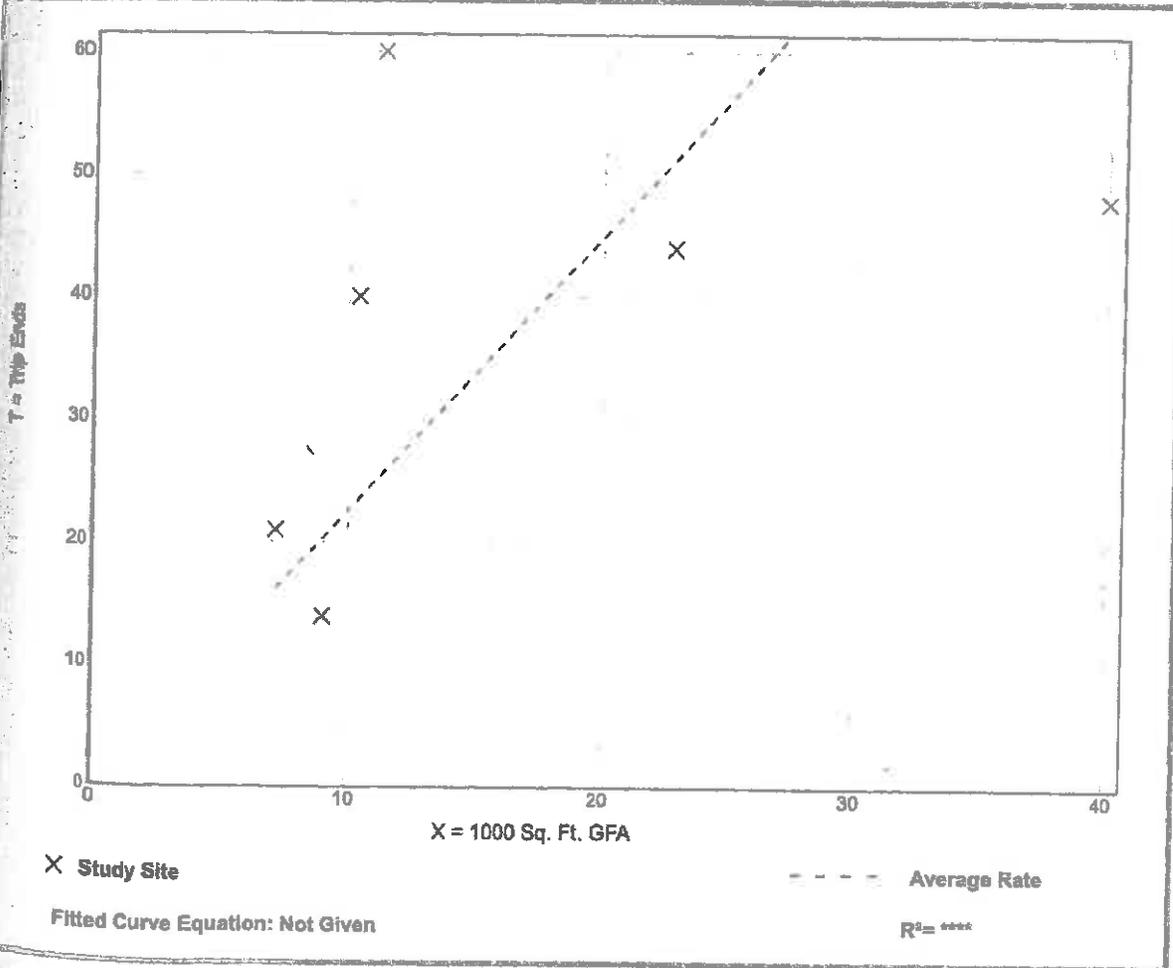
Automobile Care Center (942)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
 On a: Weekday,
 Peak Hour of Adjacent Street Traffic,
 One Hour Between 7 and 9 a.m.
 Setting/Location: General Urban/Suburban
 Number of Studies: 6
 1000 Sq. Ft. GFA: 17
 Directional Distribution: 66% entering, 34% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 2.25 | 1.20 - 5.30 | 1.49 |

Data Plot and Equation



(1842)

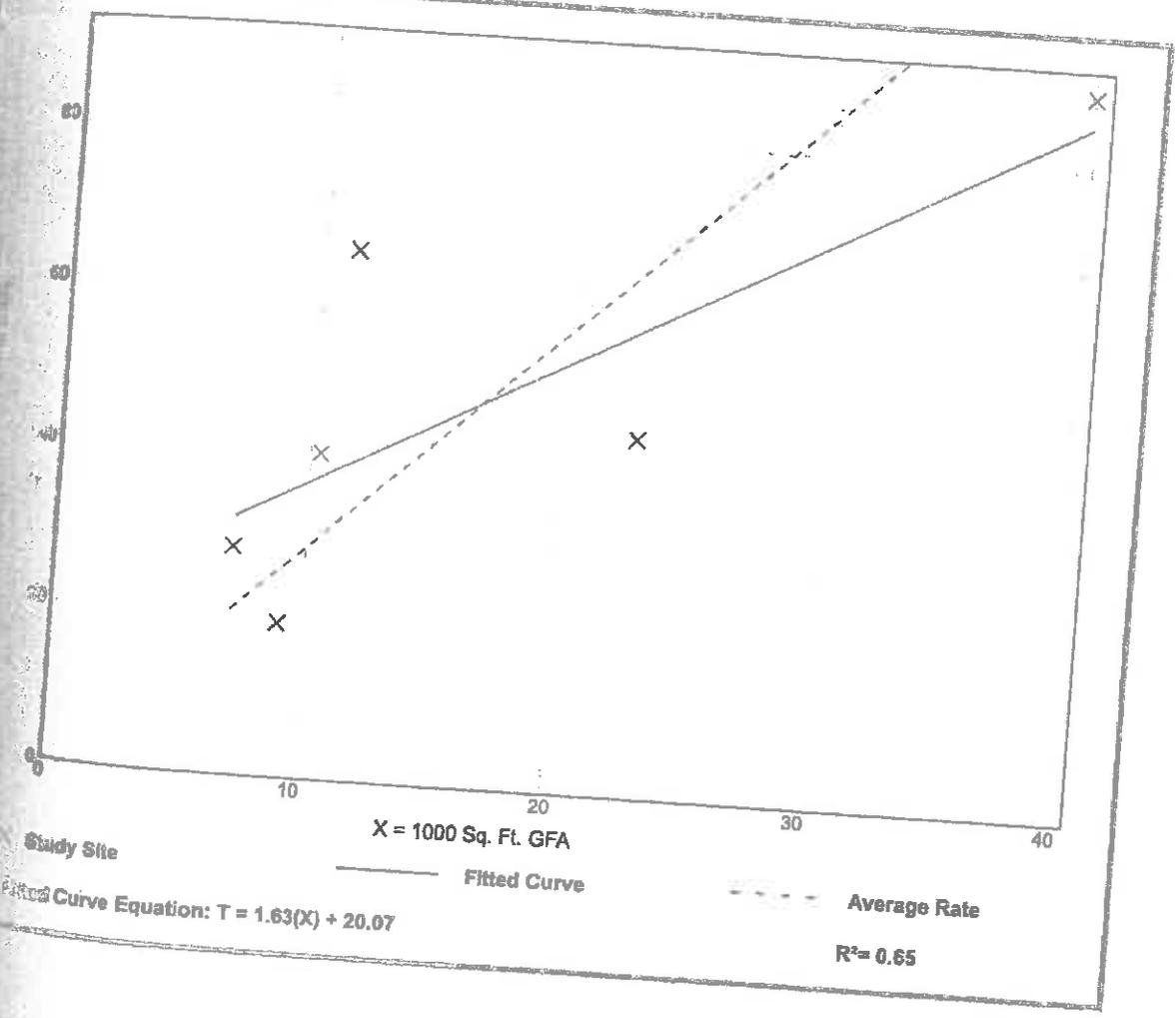
Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Weekday,
AM Peak Hour of Generator

Setting/Location: General Urban/Suburban
Number of Studies: 6
1000 Sq. Ft. GFA: 17
Directional Distribution: 56% entering, 44% exiting

Vehicle Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 2.83 | 1.93 - 5.74 | 1.35 |

Data Plot and Equation



Automobile Care Center (942)

Vehicle Trip Ends vs: 1000 Sq. Ft. GFA
On a: Saturday

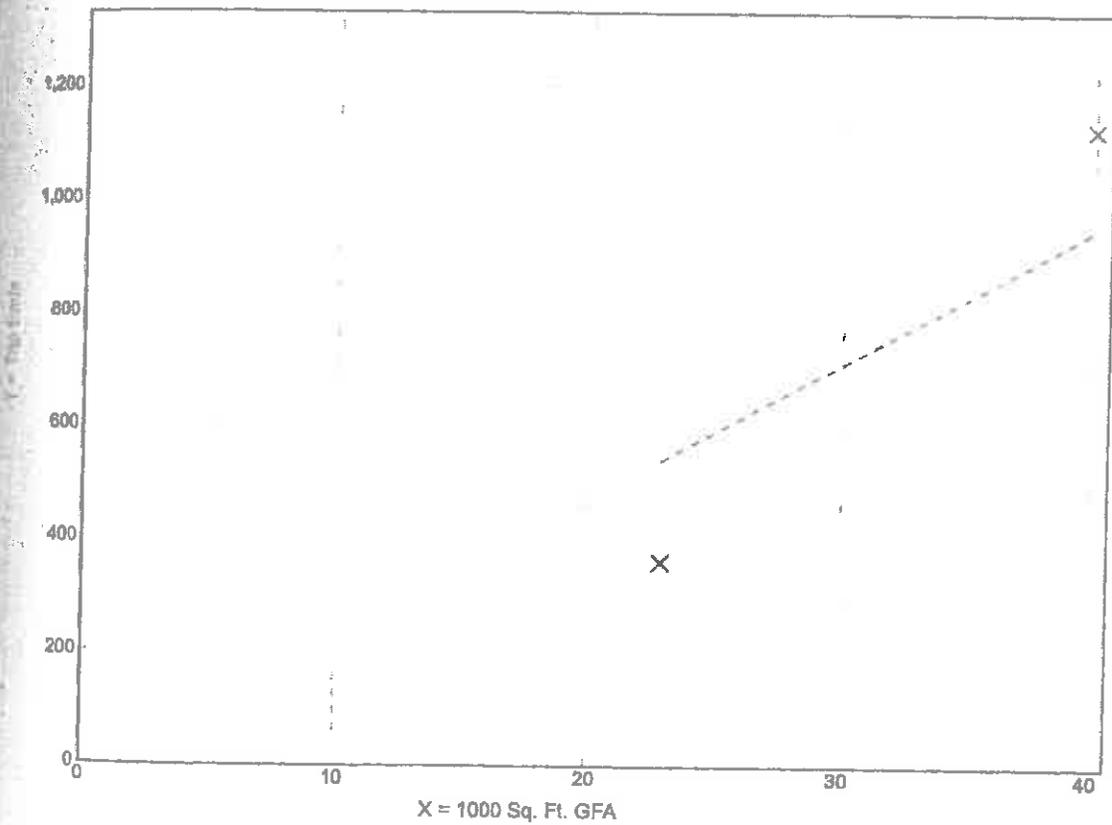
Setting/Location: General Urban/Suburban
Number of Studies: 2
1000 Sq. Ft. GFA: 31
Directional Distribution: 50% entering, 50% exiting

Life Trip Generation per 1000 Sq. Ft. GFA

| Average Rate | Range of Rates | Standard Deviation |
|--------------|----------------|--------------------|
| 23.72 | 15.87 - 28.20 | . |

Plot and Equation

Caution - Small Sample Size



X Study Site

Fitted Curve Equation: Not Given

--- Average Rate

R² = ****

Stormwater Management Report

Auto Body Shop

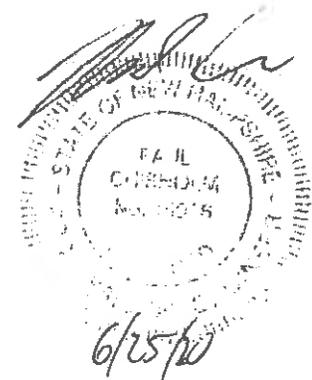
Map 128; Lots 31, 32 & 84
Map 132; Lots 38 & 84
West Glenwood Street
Nashua, New Hampshire

June 22, 2020

KNA Project No. 17-1011-1

Prepared For: Roscommon Investments, LLC
147 Daniel Webster Highway
Nashua, NH 03060

Prepared By: Keach-Nordstrom Associates, Inc.
10 Commerce Park North, Suite 3
Bedford, New Hampshire 03110
(603) 627-2881
(603) 627-2915 (fax)



KNA
KEACH-NORDSTROM ASSOCIATES, INC.

In addition, the "Pre/Post Development Drainage Area Plans" graphically define and illustrate the extent of each watershed or catchment area investigated.

B. Pre-Development Drainage Conditions

In the pre-development scenario, two (2) points of analysis (POA) have been identified as the appropriate points to compare pre vs. post development rates of stormwater discharge. These points of analysis reflect the main discharge points of the site and were analyzed to show the impact from the proposed improvements.

The pre-development drainage model's POA is further described as follows:

- Link A Existing Wetland
- Link B DW Highway Drainage System

In general, the site slopes from the Everett Turnpike down to Daniel Webster Highway. There is a small wetland located on site that collects a portion of runoff generated at the south of the site, which ultimately drains to the drainage system on D.W. Highway. For a more visual description of the information presented in this section, please refer to the attached "Pre-Development Drainage Areas Plan" attached in the appendix of this report.

C. Post-Development Drainage Conditions:

The same POA's that were identified in the pre-development scenario have been analyzed in the post-development scenario.

The proposed stormwater management system utilizes both open and closed practices for the collection, storage, and infiltration of runoff. Stormwater runoff generated from the proposed building's roof will be piped to a subsurface infiltration system designed to recharge runoff into the groundwater. The subsurface system is proposed as a Stormtech SC-310-3, which is made up of a series of chambers that detain runoff long enough for it to infiltrate into the existing soils. An outlet structure will control the flow out of the system and send overflow through a series of deep sump catch basins to a detention pond. Runoff generated from the parking lot and overflow parking area will be collected in the same series of catch basins and piped to the detention pond. The detention pond is designed to detain runoff in order to mitigate peak flow rates. Runoff contained within the detention pond will flow through an outlet structure into a proposed treatment swale. The treatment swale is designed to treat excess runoff before it is discharged into the existing wetland at Link A. A stone berm level spreader is located at the end of the swale, which will diffuse the treated runoff to prevent erosion.

There is a small section of the driveway connected to West Glenwood Road that is not collected within the closed drainage system. To detain and treat this runoff, a surface sand filter is proposed. The filter captures runoff from the proposed driveway before it is discharged into an existing catch basin located on West Glenwood Street. This catch basin ties into the drainage system located on Daniel Webster Highway, which is analyzed as Link B.

The peak stormwater runoff rate for the specific storm frequencies is presented and analyzed in the subsequent summary section of this report (Table 1). For a more visual description of the information presented in this section, please refer to the attached "Post-Development Drainage Areas Plan" attached in the appendix of this report.

- 2) The design has provided catch basins with sumps to capture runoff and reduce the overland flow, thereby reducing erosion; and
- 3) Construction of rip-rap at the outlet of the stormwater management areas; and
- 4) Two detention ponds and an infiltration practice were designed to reduce runoff and volume.



KEACH-NORDSTROM ASSOCIATES, INC.

July 24, 2020

Ms. Linda McGhee
Deputy Planning Manager
City of Nashua
229 Main Street, P.O. Box 2019
Nashua, New Hampshire 03061

**Subject: Waiver Request – Nashua LUC 190-184(D)(1) -Landscaped Islands
Auto Body Shop Site Plan for Roscommon Investments
KNA Project No. 17-1011-1**

Ms. McGhee:

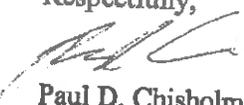
On behalf of our client, Roscommon Investments, we respectfully request a waiver from the Nashua Land Use Code (LUC) requirements of Chapter 190, Section 184 (D)(1), which requires landscaped islands for every 10 parking spaces in a row.

This section of the Land Use Code states that “the Planning Board may approve an alternative landscaping plan provided equivalent landscaping is provided”. The design includes significant landscaping design around the perimeter of the site instead of internally within a few landscaped islands. This particular use (automotive) demands as much open pavement as possible to accommodate winter plowing operations. It takes a lot of time to shift cars during plowing and is beneficial to leave the middle of the parking and storage areas open for operational purposes.

Strict conformity of the regulation would pose an unnecessary hardship and granting this waiver will not be contrary to the spirit and intent of this regulation because the Applicant believes an equivalent amount of landscaping is provided.

We appreciate your time and consideration of this request.

Respectfully,


Paul D. Chisholm, PE
Vice President, Engineering
Keach-Nordstrom Associates, Inc.

Civil Engineering

Land Surveying

Landscape Architecture

10 Commerce Park North, Suite 3B

Bedford, NH 03110

Phone (603) 627-2881

Fax (603) 627-2915

3 Congress Street, Nashua, NH 03062 (603) 883-2057
 131 Middlesex Turnpike, Burlington, MA 01803 (781) 203-1501
 www.haynerswanson.com

Hayner/Swanson, Inc.



MAP 'E', LOT 744
 SITE PLAN

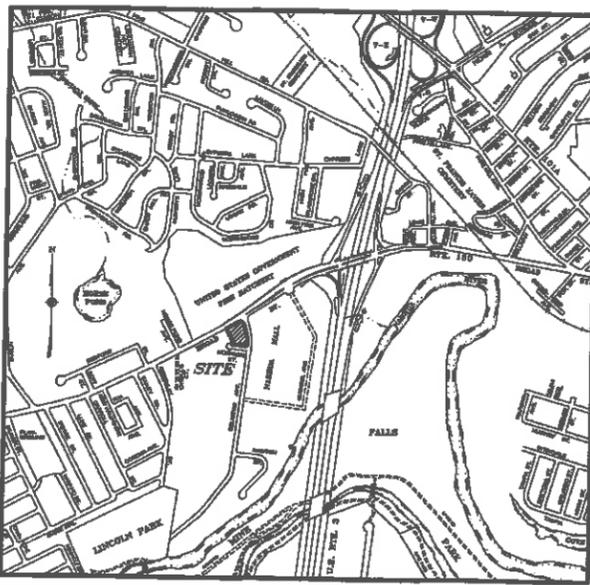
PROPOSED CREDIT UNION BUILDING

190 BROAD STREET
 NASHUA, NEW HAMPSHIRE

PREPARED FOR / RECORD OWNER

GRANITE STATE CREDIT UNION

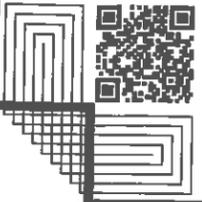
1415 ELM STREET
 MANCHESTER, NEW HAMPSHIRE 03108
 (603)-668-2221



VICINITY PLAN
 SCALE 1"=100'

30 JULY 2020

| INDEX OF PLANS | | |
|---------------------|----------------------------------|----------------------|
| SHEET No. | TITLE | |
| 1 OF 16 | MASTER SITE PLAN | 1"=30' |
| 2 OF 16 | EXISTING CONDITIONS PLAN | 1"=20' |
| 3 OF 16 | SITE DEMOLITION PLAN | 1"=20' |
| 4 OF 16 | SITE PLAN | 1"=20' |
| 5 OF 16 | FIRE TRUCK TURNING ANALYSIS PLAN | 1"=30' |
| 6 OF 16 | UTILITY PROFILES AND SMA DETAILS | 1/8"=20' 1/4"=40' |
| 7-8 OF 16 | DETAIL SHEET - GENERAL SITE | |
| 9 OF 16 | DETAIL SHEET - SEWER | |
| 10 OF 16 | DETAIL SHEET - WATER | |
| 11 OF 16 | EROSION CONTROL PLAN | 1"=20' |
| 12 OF 16 | DETAIL SHEET - EROSION CONTROL | |
| 13 OF 16 | LANDSCAPE PLAN | 1"=20' |
| 14 OF 16 | DETAIL SHEET - LANDSCAPE | |
| 15 OF 16 | PHOTOMETRIC LIGHTING PLAN | 1"=20' |
| 16 OF 16 | LIGHTING SPECIFICATIONS | |
| BUILDING ELEVATIONS | | |

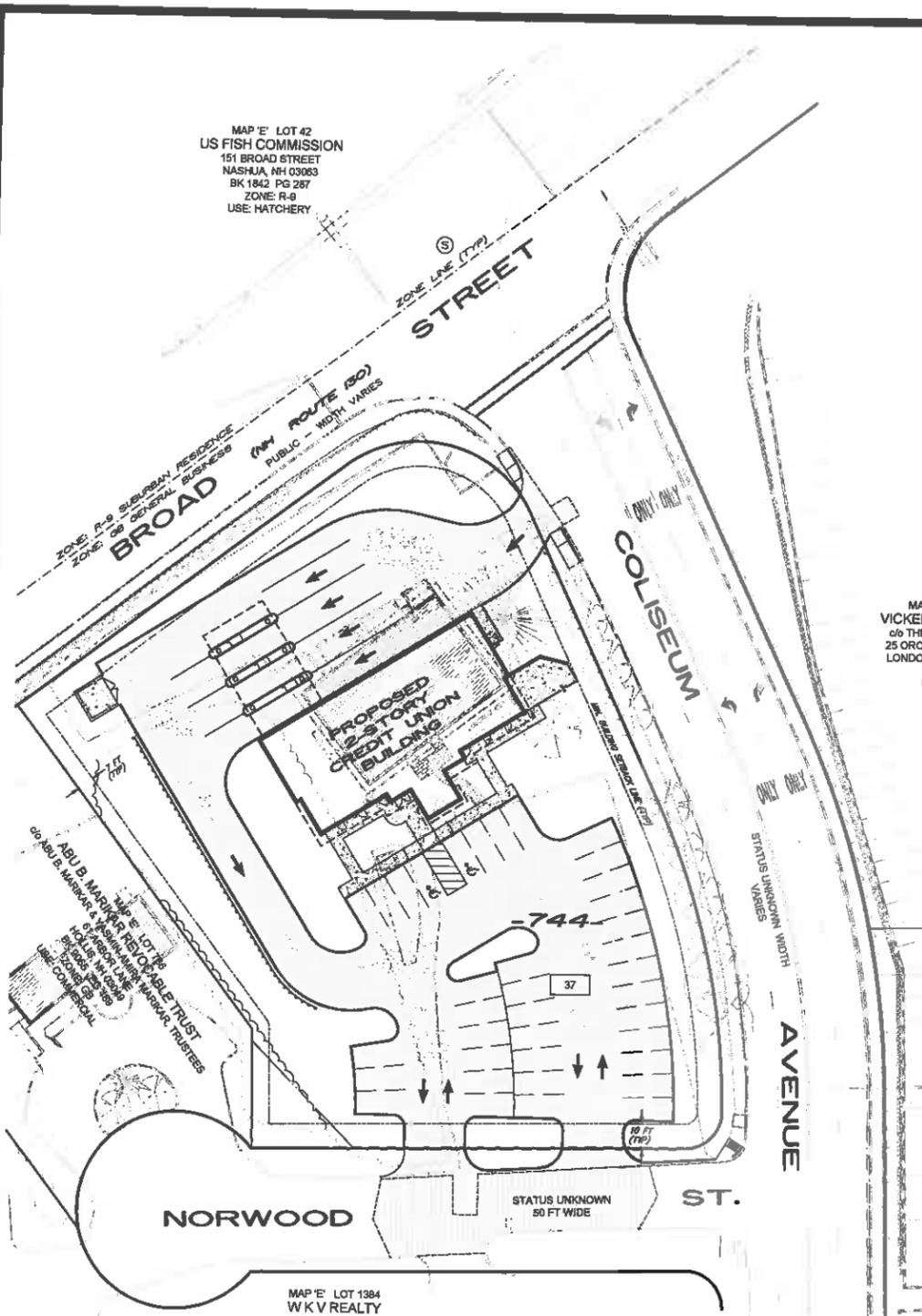


HSI Hayner/Swanson, Inc.

Civil Engineers/Land Surveyors
 3 Congress Street, Nashua, NH 03062 (603) 883-2057
 131 Middlesex Turnpike, Burlington, MA 01803 (781) 203-1501
 www.haynerswanson.com



8-25-20

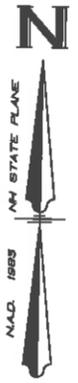


MAP 'E' LOT 42
US FISH COMMISSION
151 BROAD STREET
NASHUA, NH 03063
BK 1842 PG 287
ZONE: R-8
USE: HATCHERY

MAP 'E' LOT 2187
VICKERY REALTY CO
c/o THE MEG COMPANIES
25 ORCHARD DRIVE DRIVE
LONDONDERRY, NH 03053
ZONE: GB
USE: RETAIL

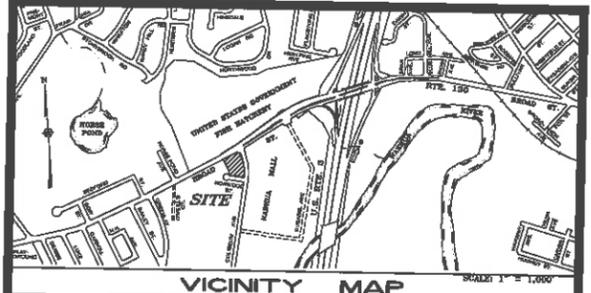
MAP 'E' LOT 2189
VICKERY REALTY CO
c/o THE MEG COMPANIES
25 ORCHARD VIEW DRIVE
LONDONDERRY, NH 03053
ZONE: GB
USE: RETAIL

MAP 'E' LOT 1384
W K V REALTY
5 COLISEUM AVENUE
NASHUA, NH 03063-3206
BK 4252 PG 283
ZONE: GB
USE: COMMERCIAL



NOTES - CONT'D:

14. ALL LIGHTING SHALL BE AS SHOWN ON THE PLANS, DIRECTED ONTO THE SITE AND CONFORM TO APPLICABLE CITY OF NASHUA LAND USE CODE REGULATIONS.
15. A PRE-CONSTRUCTION MEETING WITH THE CITY OF NASHUA PLANNING/ENGINEERING/FIRE OFFICIALS SHALL TAKE PLACE PRIOR TO ANY WORK BEING PERFORMED.
16. HOURS OF OPERATION:
MONDAY thru FRIDAY: 8:30 AM TO 5:00 PM
SATURDAY: 8:30 AM TO 12:00 NOON
17. THE APPLICANT SHALL SUBMIT AN ELECTRONIC FILE OF THE SITE PLAN (PLOT) PRIOR TO ISSUANCE OF A BUILDING PERMIT.
18. PRIOR TO A BUILDING PERMIT BEING ISSUED, BONDING FOR ALL PUBLIC IMPROVEMENTS SHALL BE SUBMITTED TO AND APPROVED BY THE ENGINEERING DEPARTMENT AND CORPORATION COUNSEL.
19. PRIOR TO A BUILDING PERMIT BEING ISSUED, DOCUMENTS PERTAINING TO THE STORM WATER OPERATION AND MAINTENANCE PLAN SHALL BE RECORDED.
20. THE PARCEL IS NOT LOCATED IN A FLOOD HAZARD AREA AS DETERMINED FROM THE FLOOD INSURANCE STUDY (FIRM), HILLSBOROUGH COUNTY, CITY OF NASHUA, NEW HAMPSHIRE, COMMUNITY No. 33307, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, MAP NUMBER: 330102513D, DATED: SEPTEMBER 25, 2008.
21. ROOF DRAIN TIE-INS AND DRAIN LINES SHALL BE INSPECTED PRIOR TO BACKFILLING AND PAVING.
22. MECHANICAL APPURTENANCES, IF ANY, SHALL BE SCREED AND FINISHED TO MATCH THE BUILDING EXTERIOR. MECHANICAL APPURTENANCES SHALL NOT EXCEED 50 DECIBELS BETWEEN 7 AM - 9 PM AND 45 DECIBELS AT NIGHT 9 PM - 7 AM ALONG RESIDENTIAL ZONING DISTRICTS.
23. THE DEVELOPER/BUILDER SHALL WORK WITH THE CITY OF NASHUA PLANNING STAFF TO OPTIMIZE SIGHT DISTANCE, WHICH MAY REQUIRE TREE REMOVAL, AT THE NORWOOD STREET/COLISEUM AVENUE INTERSECTION.
24. PRESENT OWNER OF RECORD:
MAP 'E', LOT 744
GRANITE STATE CREDIT UNION
1415 ELM STREET
MANCHESTER, NEW HAMPSHIRE 03101
BK 9316, PG 166



PLAN REFERENCES:

1. RIVERSIDE PARK, NASHUA, NEW HAMPSHIRE, SCALE: 1"=60', DATED: AUGUST 1965, PREPARED BY: A. E. HAYNER & SONS, INC. RECORDED: HCRD - PLAN No. 3130.
2. BOUNDARY PLAN OF LAND OF, CHANTAL VON OLDENBURG, NORWOOD STREET, SHT F - LOT 736, NASHUA, NEW HAMPSHIRE, SCALE: 1"=20', DATED: 8 JUNE 1987, PREPARED BY: GEORGE F. KELLER INC. RECORDED: HCRD - PLAN No. 20757
3. NASHUA, NH BROAD STREET 1938 S.A.O., SCALE: 1"= 50', DATED JANUARY 1938 ON FILE AT THE CITY OF NASHUA PUBLIC WORKS DEPARTMENT, CITY ENGINEERS OFFICE.

NOTES:

1. SITE AREA: 1.224 ACRES (53,333 SF)
2. PRESENT ZONING: GB - GENERAL BUSINESS

| MINIMUM LOT REQUIREMENTS | GB | LOT 744 |
|--------------------------|-----------|-----------|
| - LOT AREA | 10,000 SF | 53,333 SF |
| - LOT FRONTAGE | 50 FT | 709 FT |
| - LOT WIDTH | 50 FT | 194.7 FT |
| - LOT DEPTH | 75 FT | N/A FT |
| MINIMUM YARD SETBACKS | | |
| - FRONT YARD | 10 FT | 33.9 FT |
| - SIDE YARD | 7 FT | 67.8 FT |
| - REAR YARD | 10 FT | N/A FT |
| - MAX. BUILDING HEIGHT | 50 FT | 25 FT |
| - MAX. STORIES | 5 | 2 |
| - OPEN SPACE (%) | 10% | 37.6% |
| - F.A.R. | 1.25 | 0.22 |
3. LOT NUMBERS REFER TO THE CITY OF NASHUA ASSESSORS MAP 'E'.
4. SITE IS SERVICED BY MUNICIPAL SEWER, WATER BY PENNICHUCK WATER WORKS AND UNDERGROUND TELEPHONE, ELECTRIC AND GAS UTILITIES.
5. PURPOSE OF PLAN:
TO AMEND PLAN HNR-2186, TO SHOW PROPOSED 2.5-STORY 10,000 SF BANK BUILDING WITH DRIVE-THROUGH FACILITIES AND ACCOMPANYING SITE IMPROVEMENTS.
6. PARKING:
REQUIRED (BANK):
MINIMUM: 1 SPACE/900 SF x 10,000 SF = 34 SPACES
MAXIMUM: 1 SPACE/150 SF x 10,000 SF = 67 SPACES
PROVIDED: (INCLUDING 2 RESERVED SPACES) = 37 SPACES
7. THE SUBJECT PROPERTY WAS INSPECTED BY A CERTIFIED WETLAND SCIENTIST ON AUGUST 28, 2014 AT THE DATE OF THE INSPECTION, IT WAS DETERMINED THAT THERE ARE NO WETLANDS OR ASSOCIATED BUFFERS AFFECTING THE PROPERTY.
8. ALL LANDSCAPING SHALL BE AS SHOWN ON THE PLANS AND CONFORM TO THE APPLICABLE CITY OF NASHUA LAND USE CODE UNDER ARTICLE XXVII.
9. ALL SIGNAGE SHALL CONFORM TO THE APPLICABLE CITY OF NASHUA REGULATIONS WITH ALL PERMITS SECURED PRIOR TO INSTALLATION.
10. SITE IMPROVEMENTS DEPICTED ON THE PLAN SHALL CONFORM WITH TITLE III OF THE AMERICANS WITH DISABILITIES ACT WITH REGARD TO DIMENSION, GRADE AND NUMBER OF PARKING SPACES.
11. IT SHALL BE UNLAWFUL TO MODIFY, CHANGE, OR ALTER ANY STRUCTURE SHOWN ON THIS SITE PLAN IN ANYWAY WHATSOEVER, OR CONVERT OR ALTER ANY STRUCTURE SHOWN ON THIS SITE PLAN, OR CHANGE THE ABOVE USE INDICATED ON THE PLAN WITHOUT RECEIVING APPROVAL FROM THE CITY.
12. PUBLIC STREET RESTORATION WORK SHALL BE IN ACCORDANCE WITH N.H.S.A. SECTION 286:13, LATEST EDITION.
13. FUTURE BUILDING CONSTRUCTION SHALL INCORPORATE FOUNDATION DRAINAGE SYSTEMS, EXCEPT WHERE AN INVESTIGATION ESTABLISHES THAT SPECIFIC BUILDING SITES ARE LOCATED IN WELL-DRAINED SOILS AND THAT SUCH SYSTEMS ARE NOT REQUIRED.

APPROVED
NASHUA CITY PLANNING BOARD

CHAIRMAN _____ DATE _____

ZONING NOTE

THE ZONING/BUILDING SETBACKS DEPICTED ON THIS PLAN ARE THOSE WE HAVE INTERPRETED FROM THE LATEST ZONING ORDINANCE OF THE MUNICIPALITY AND, AS SUCH, ARE ONLY OPINIONS EXPRESSED BY HAYNER/SWANSON, INC. THE FINAL INTERPRETATION OF THE ORDINANCE CAN ONLY BE MADE BY THE APPROPRIATE ZONING AUTHORITY. SINCE BUILDING ORIENTATION, PROPOSED USES, AND OTHER FACTORS CAN AFFECT THE SETBACKS, PRIOR TO ANY DEVELOPMENT OF THIS PROPERTY, THE BUILDER/OWNER MUST CONSULT WITH THE TOWN/CITY TO INSURE THE CORRECT APPLICATION OF THE ZONING ORDINANCE.

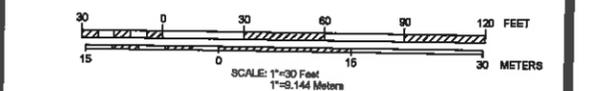
THE UNDERSIGNED DOES HEREBY AGREE TO PERFORM ALL OF THE SITE IMPROVEMENTS AS SHOWN ON THIS PLAN AND AS CONDITIONED OR STIPULATED BY THE NASHUA CITY PLANNING BOARD. ALL REQUIRED SITE IMPROVEMENTS MUST BE COMPLETED OR GUARANTEED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.

[Signature] 7-13-2020
FOR GRANITE STATE CREDIT UNION DATE



MASTER SITE PLAN
(LOT 744, MAP 'E')
PROPOSED CREDIT UNION BUILDING
NASHUA, NEW HAMPSHIRE

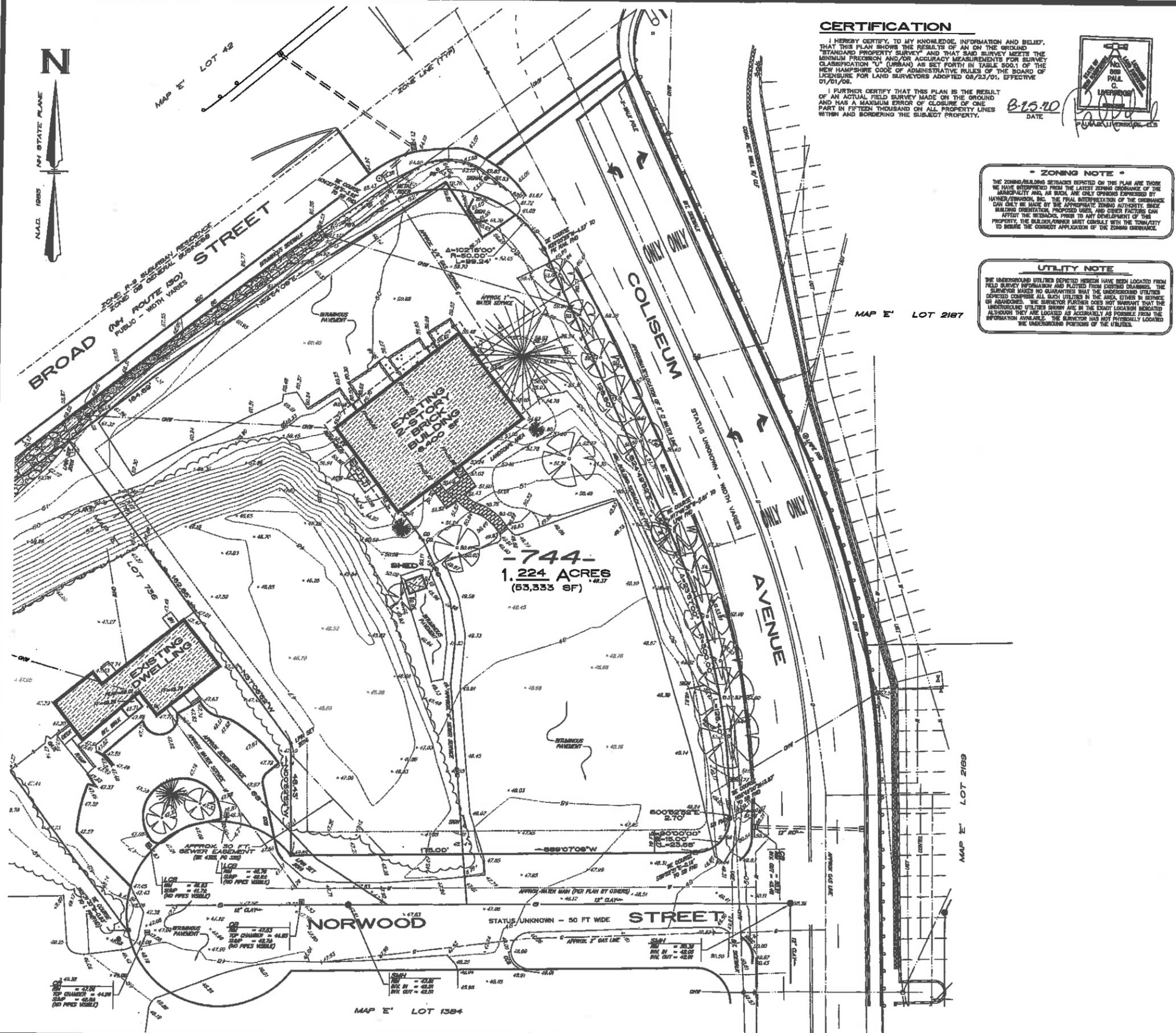
PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108



30 JULY 2020

HISI Hayner/Swanson, Inc.
Civil Engineer/Land Surveyor
131 Middlesex Turnpike
Burlington, MA 01803
(603) 859-2657
www.hayner-swanson.com

N



CERTIFICATION

I HEREBY CERTIFY TO MY KNOWLEDGE, INFORMATION AND BELIEF, THAT THIS PLAN SHOWS THE RESULTS OF AN ON THE GROUND "STANDARD PROPERTY SURVEY" AND THAT SAID SURVEY MEETS THE MINIMUM PRECISION AND/OR ACCURACY MEASUREMENTS FOR SURVEY CLASSIFICATION "U" (URBAN) AS SET FORTH IN TABLE 500.1 OF THE NEW HAMPSHIRE CODE OF ADMINISTRATIVE RULES OF THE BOARD OF LICENSEURE FOR LAND SURVEYORS ADOPTED 08/23/01, EFFECTIVE 01/01/08.

B-15-10
DATE



ZONING NOTE

THE ZONING/BUILDING SETBACKS DEPICTED ON THIS PLAN ARE THOSE WE HAVE INTERPRETED FROM THE LATEST ZONING ORDINANCE OF THE MUNICIPALITY AND, AS SUCH, ARE ONLY OPINIONS EXPRESSED BY HAYNER/SWANSON, INC. THE FINAL INTERPRETATION OF THE ORDINANCE CAN ONLY BE MADE BY THE APPROPRIATE ZONING AUTHORITY. SINCE BUILDING ORIENTATION, PROPOSED USES, AND OTHER FACTORS CAN AFFECT THE SETBACKS, PRIOR TO ANY DEVELOPMENT OF THE PROPERTY, THE SUBSETOWNER MUST CONSULT WITH THE TOWN/CITY TO ENSURE THE CORRECT APPLICATION OF THE ZONING ORDINANCE.

UTILITY NOTE

THE UNDERGROUND UTILITIES DEPICTED HEREON HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND PLOTTED FROM EXISTING DRAWINGS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES DEPICTED COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR FURTHER DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM THE INFORMATION AVAILABLE. THE SURVEYOR HAS NOT PHYSICALLY LOOKED INTO THE UNDERGROUND PORTIONS OF THE UTILITIES.

GENERAL NOTES:

1. THE EXISTING TOPOGRAPHY, AS SHOWN ON THE PLANS, IS BASED ON AN ACTUAL FIELD SURVEY MADE ON THE GROUND IN AUGUST 2014.
2. THE NASHUA CITY DATUM HAS BEEN USED ON THIS PROJECT. (NASHUA CITY DATUM TO NVD 1928 DATUM = + 00.47).
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE ACCURACY OF THE EXISTING TOPOGRAPHY PRIOR TO EARTHWORK OPERATIONS. NO CLAIM FOR EXTRA WORK DUE TO TOPOGRAPHIC INACCURACY SHALL BE CONSIDERED AFTER EARTHWORK HAS COMMENCED.
4. THE CONTRACTOR SHALL ONLY USE BENCHMARKS AS PROVIDED BY THE ENGINEER.
5. MAP E, LOT 744 IS SUBJECT TO THE RESTRICTIONS CONTAINED IN THE DEED FROM F.H.M., INC. RECORDED AT BOOK 2888, PAGE 82 AS AMENDED BY THE LIMITED WAIVER OF VICKERY REALTY CO. TRUST RECORDED AT BOOK 8916, PAGE 178 AND THE CONSENT AND WAIVER OF TD BANK, NA AS RECORDED AT BOOK 8916 PAGE 175

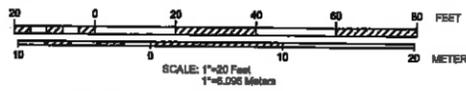
LEGEND

- 100.0 EXISTING GROUND CONTOUR
- 100.5 EXISTING SPOT ELEVATION
- 100.0 PROPOSED GRADE
- 100.5 PROPOSED SPOT GRADE
- STORM DRAIN & CATCH BASIN
- STORM DRAIN & MANHOLE
- SANITARY SEWER & MANHOLE
- WATER MAIN & HYDRANT
- WATER MAIN & GATE VALVE
- GAS LINE & GATE VALVE
- UTILITY POLE WITH GUY SUPPORT
- STREET LIGHT
- OVERHEAD ELECTRIC & TELEPHONE
- UNDERGROUND ELEC./TEL & MANHOLES SIGN
- TREE LINE
- N.H. HIGHWAY BOUND
- STONE BOUND
- IRON PIN
- IRON PIPE
- DRILL HOLE & STONE WALL
- STONE BOUND TO BE SET
- IRON PIN TO BE SET
- BUILDING SETBACK LINE
- CHAINLINK FENCE
- CAPE COD BERM
- VERTICAL GRANITE CURBING
- SLOPE GRANITE CURBING
- STORMWATER RUNOFF DIRECTION
- HANDICAP PARKING SPACE
- HANDICAP SIDEWALK RAMP
- PARKING SPACE COUNT
- GUARD RAIL
- PAVEMENT SAWCUT
- CONCRETE
- PROPOSED FULL-DEPTH PAVEMENT
- PROPOSED PAVEMENT OVERLAY
- RIPRAP / STONE
- RETAINING WALL
- CONIFEROUS TREE
- DECIDUOUS TREE

| No. | DATE | REVISION | BY |
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| | | | |

EXISTING CONDITIONS PLAN
(LOT 744, MAP "E")
PROPOSED CREDIT UNION BUILDING
NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108

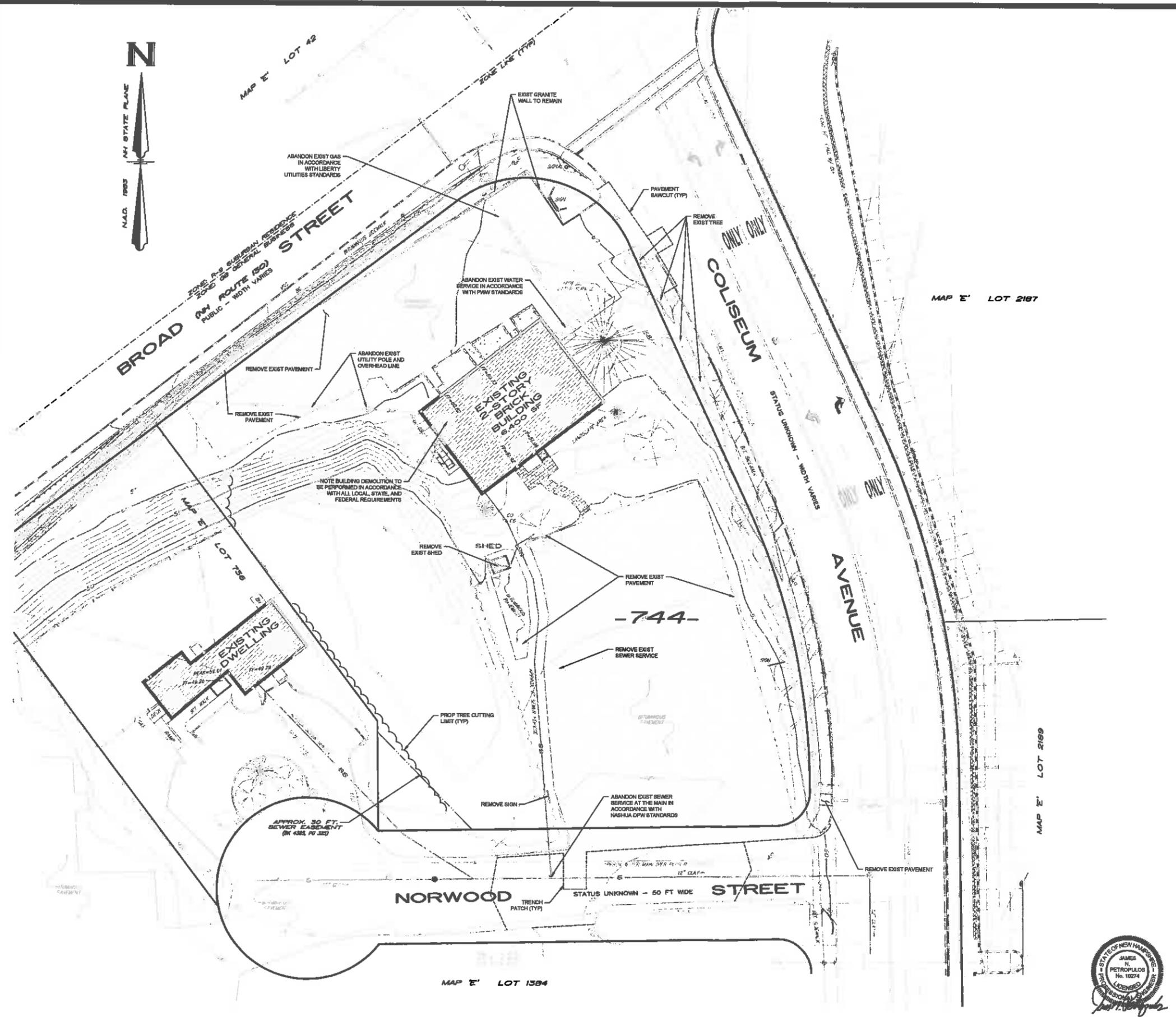


30 JULY 2020



3 Congress Street
Nashua, NH 03083
(603) 883-5057
www.haynerswanson.com

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SITE DEMOLITION NOTES:

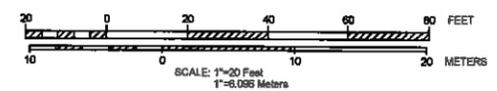
1. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL, AND DISPOSING IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES, OF ALL STRUCTURES, PADS, WALLS, FENCES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE, STRUCTURES, UTILITIES, ETC. SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER THE GEOTECHNICAL SPECIFICATIONS.
2. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
3. THE CONTRACTOR SHALL COORDINATE WITH RESPECTIVE UTILITY COMPANIES PRIOR TO THE REMOVAL AND/OR RELOCATION OF UTILITIES. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY COMPANY CONCERNING PORTIONS OF WORK WHICH MAY BE PERFORMED BY THE UTILITY COMPANY'S FORCES AND ANY FEES WHICH ARE TO BE PAID TO THE UTILITY COMPANY FOR THEIR SERVICES. THE CONTRACTOR IS RESPONSIBLE FOR PAYING ALL FEES AND CHARGES.
4. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ON SITE LOCATIONS OF EXISTING UTILITIES.
5. ALL EXISTING BEIERS, PIPING AND UTILITIES SHOWN ARE NOT TO BE INTERPRETED AS THE EXACT LOCATION, OR AS THE ONLY OBSTACLES THAT MAY OCCUR ON THE SITE. VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ANY ANTICIPATED FEATURES. GIVE NOTICE TO ALL UTILITY COMPANIES REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICE LINES AND CAP ALL LINES BEFORE PROCEEDING WITH THE WORK.
6. ELECTRICAL, TELEPHONE, CABLE, WATER, FIBER OPTIC CABLE AND/OR GAS LINES NEEDING TO BE REMOVED OR RELOCATED SHALL BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. ADEQUATE TIME SHALL BE PROVIDED FOR RELOCATION AND CLOSE COORDINATION WITH THE UTILITY COMPANY IS NECESSARY TO PROVIDE A SMOOTH TRANSITION IN UTILITY SERVICE. CONTRACTOR SHALL PAY CLOSE ATTENTION TO EXISTING UTILITIES WITHIN THE ANY ROAD RIGHT OF WAY DURING CONSTRUCTION.



| No. | DATE | REVISION | BY |
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SITE DEMOLITION PLAN
 (LOT 744, MAP "E")
PROPOSED CREDIT UNION BUILDING
 NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
 1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03103

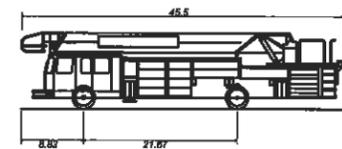
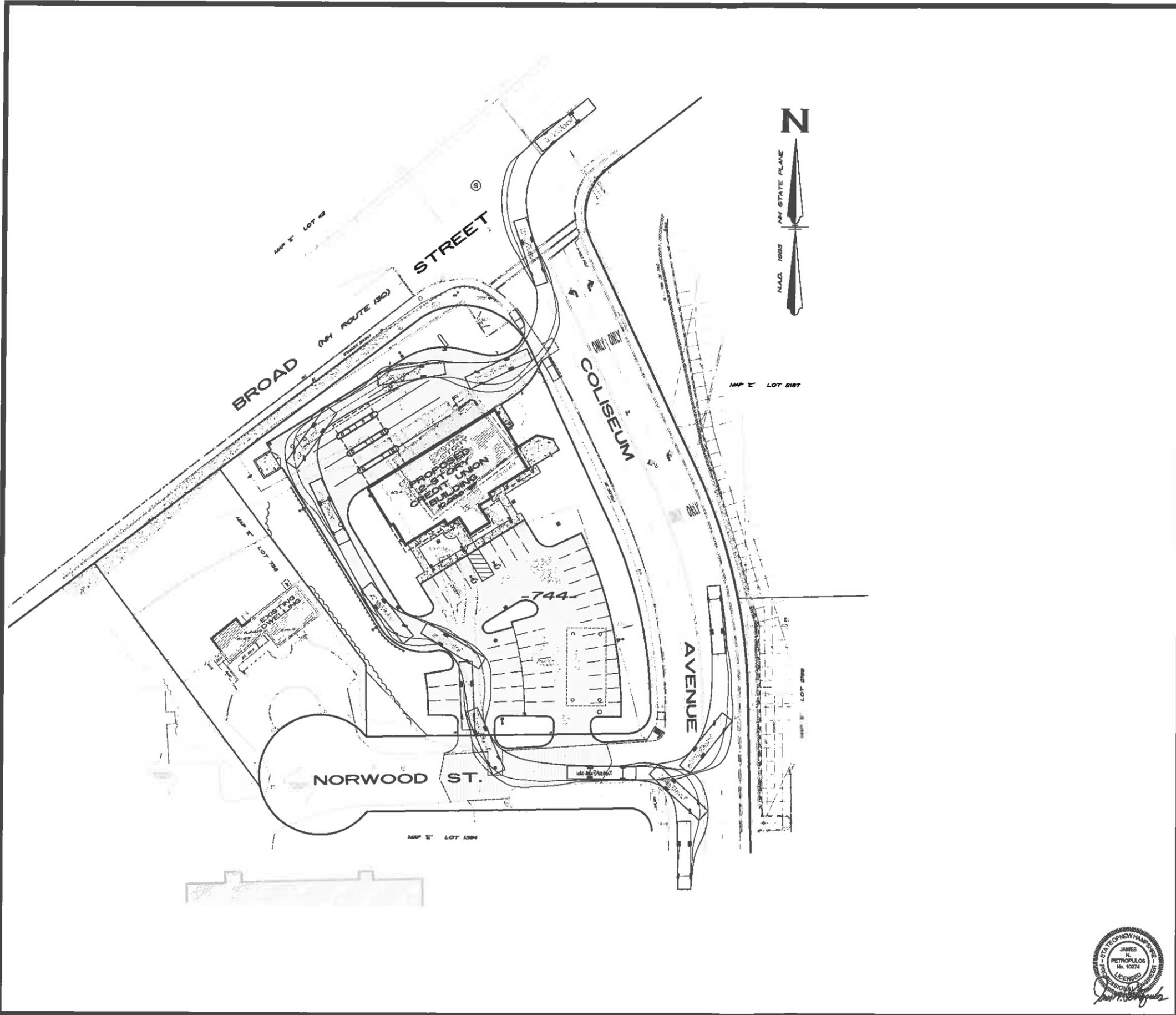


30 JULY 2020

HISI Haynes/Swanson, Inc.
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 www.hiswanson.com



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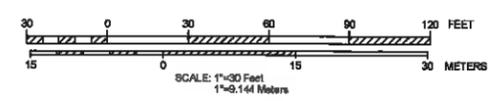


| | |
|------------------------------------|---------|
| Custom - Nashua FD Pierce Arrow-XT | 45.500R |
| Overall Length | 8.670R |
| Overall Width | 10.522R |
| Overall Body Height | 1.052R |
| Min Body Ground Clearance | 9.085R |
| Track Width | 4.00s |
| Lock-to-lock time | 36.920R |
| Curb to Curb Turning Radius | |

| No. | DATE | REVISION | BY |
|-----|------|----------|----|
| | | | |

FIRE TRUCK TURNING ANALYSIS PLAN
 (LOT 744, MAP "E")
PROPOSED CREDIT UNION BUILDING
 NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
 1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108



30 JULY 2020

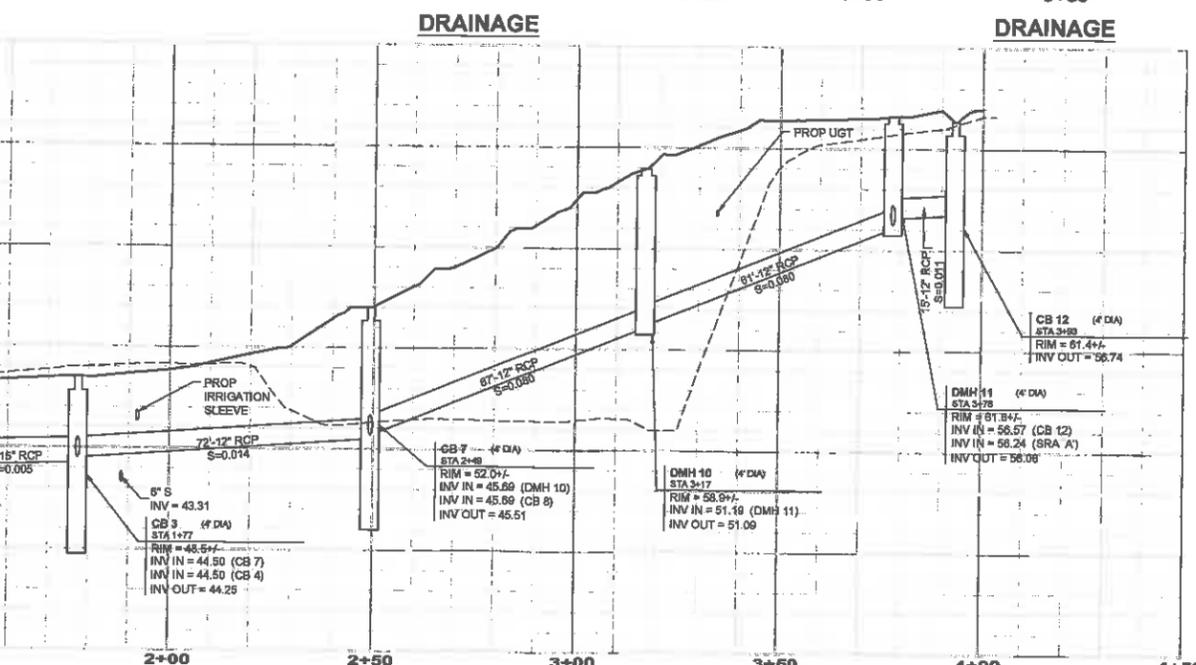
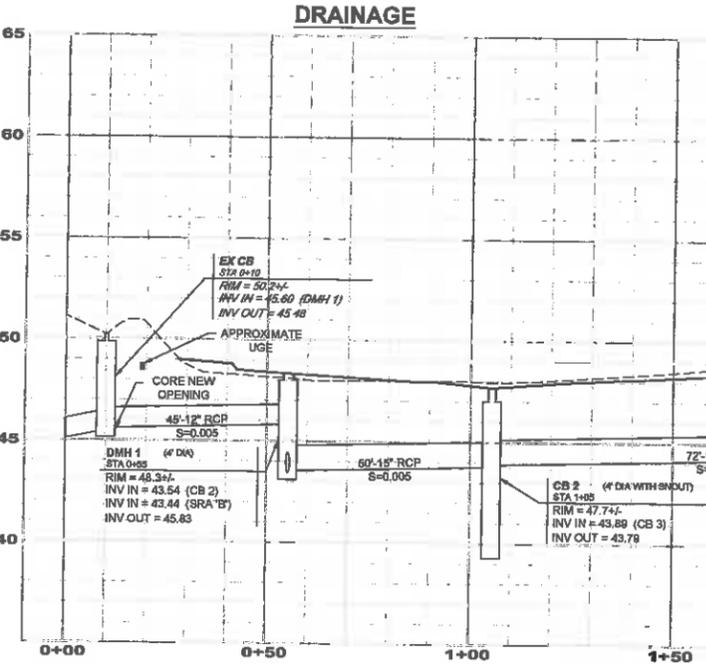
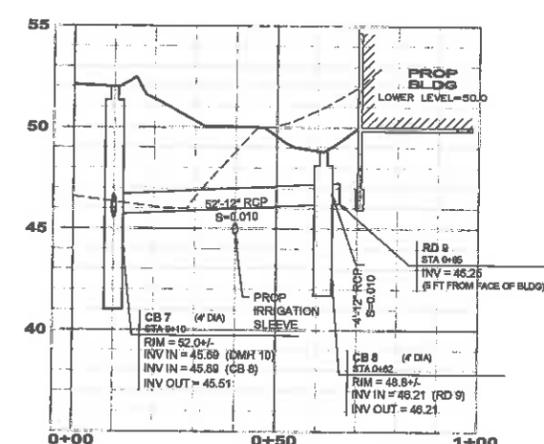
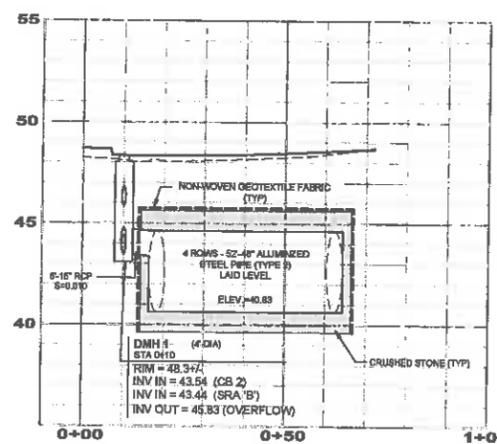
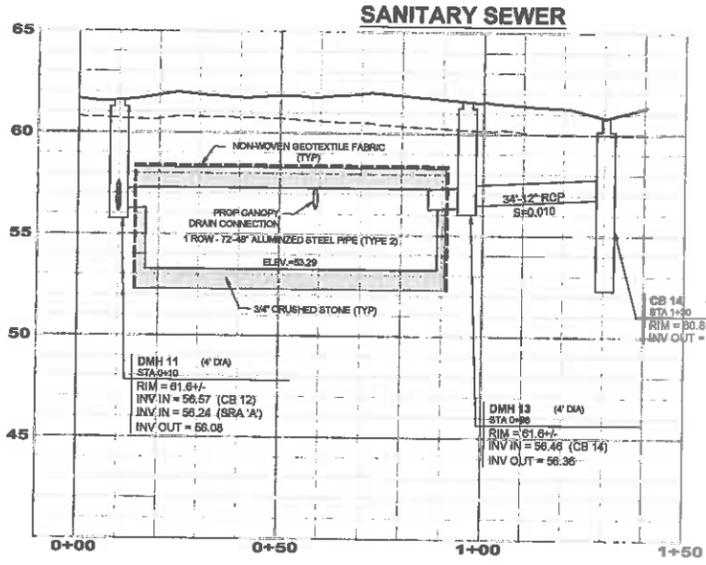
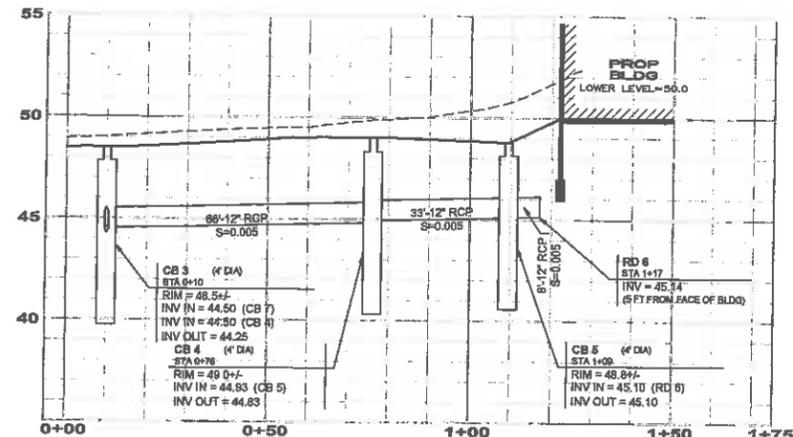
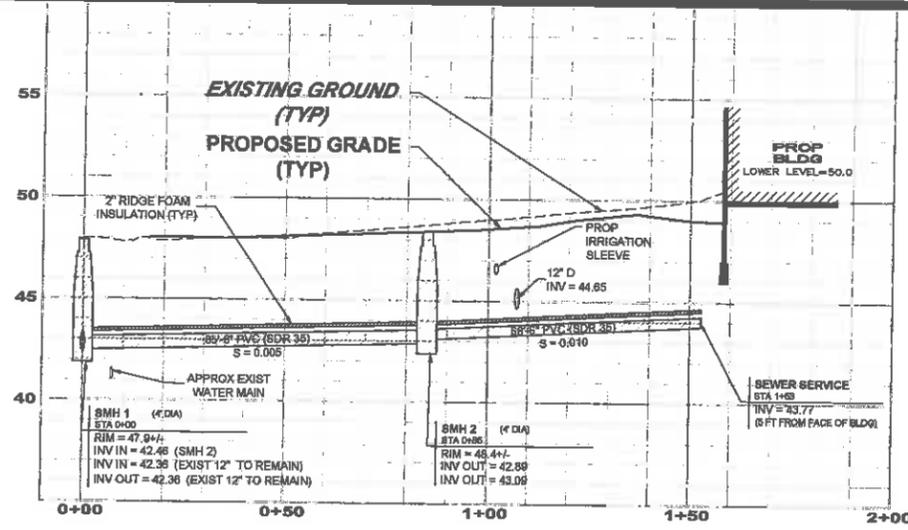
HISI Haynes/Swanson, Inc.
 Civil Engineers/Land Surveyors
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 131 Middlesex Turnpike Burlington, MA 01803
 (603) 883-2057 (781) 203-1501
 www.hisinc.com



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NOTES

- STRUCTURE DIAMETERS AS SHOWN ON DRAINAGE PROFILES ARE CONSIDERED TO BE MINIMUM INSIDE DIMENSIONS. ALL STRUCTURES SHALL BE A MINIMUM INSIDE DIAMETER OF 4" UNLESS OTHERWISE INDICATED. LARGER STRUCTURES MAY BE NECESSARY DUE TO ALIGNMENT AND/OR PIPE SIZES. STRUCTURE MANUFACTURER SHALL DETERMINE FINAL SIZE.
- PIPE LENGTHS ARE MEASURED FROM CENTERLINE OF STRUCTURE TO CENTERLINE OF STRUCTURE.
- EXTERIOR FOUNDATION WALLS AND FOOTINGS AS SHOWN ARE APPROXIMATE. REFER TO ARCHITECTURAL PLANS.



NO. DATE REVISION BY

UTILITY PROFILES AND STORMWATER MANAGEMENT AREA (SMA) DETAILS (LOT 744, MAP 'E')

PROPOSED CREDIT UNION BUILDING
NASHUA, NEW HAMPSHIRE

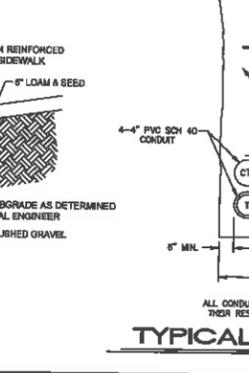
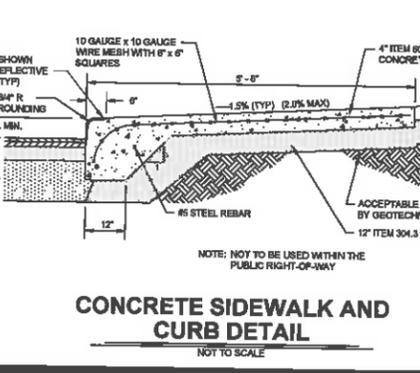
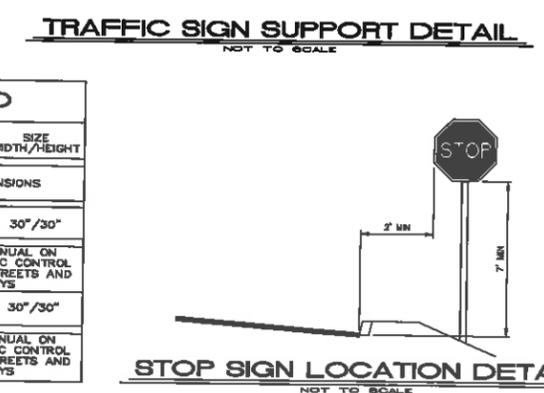
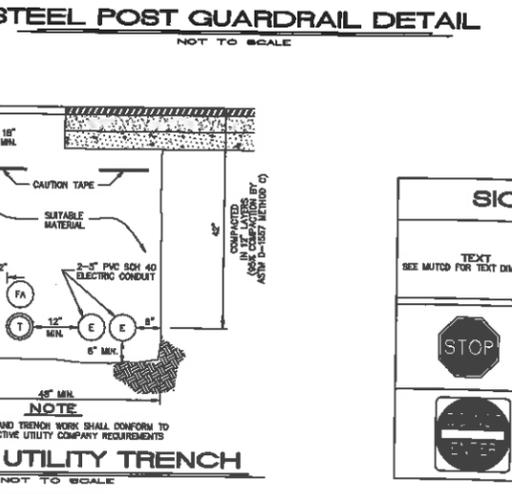
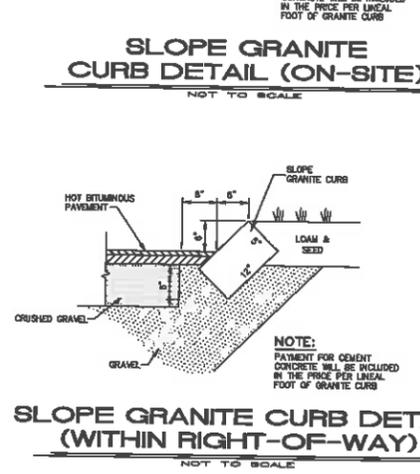
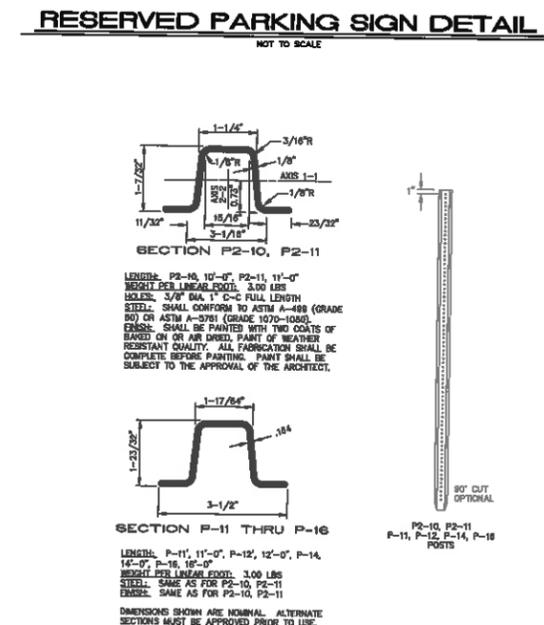
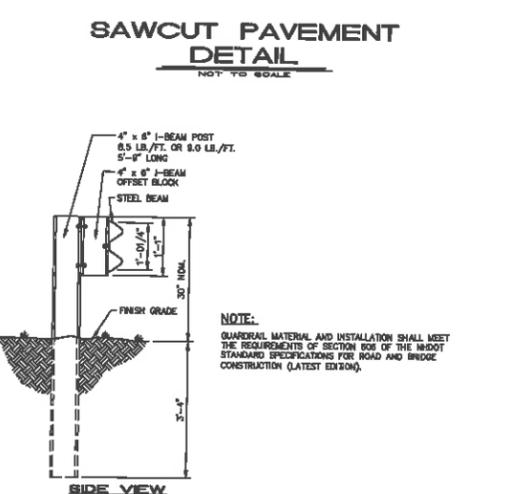
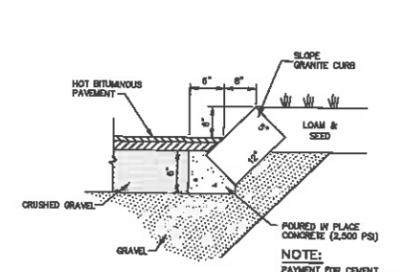
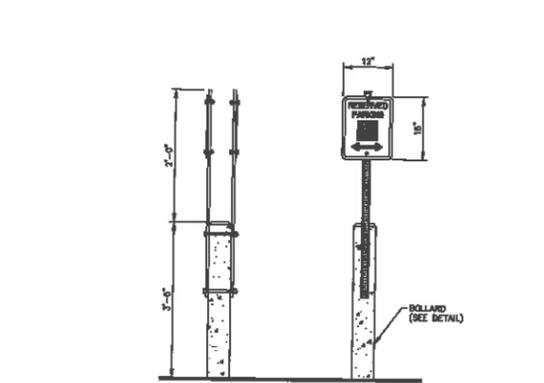
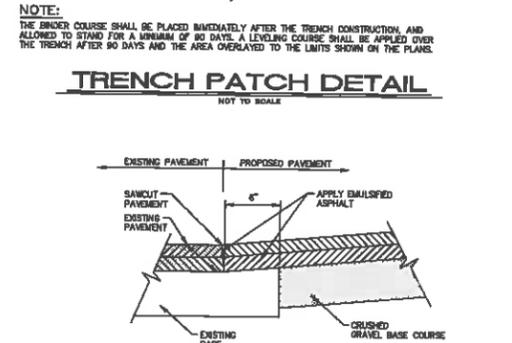
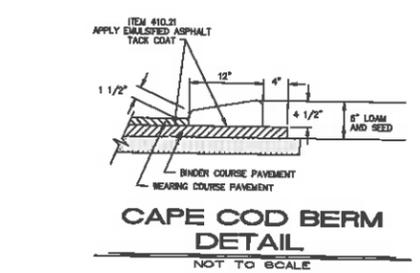
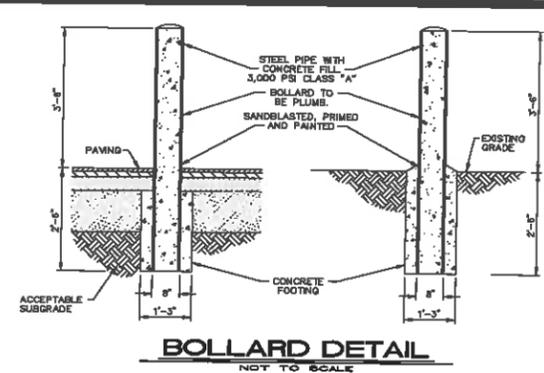
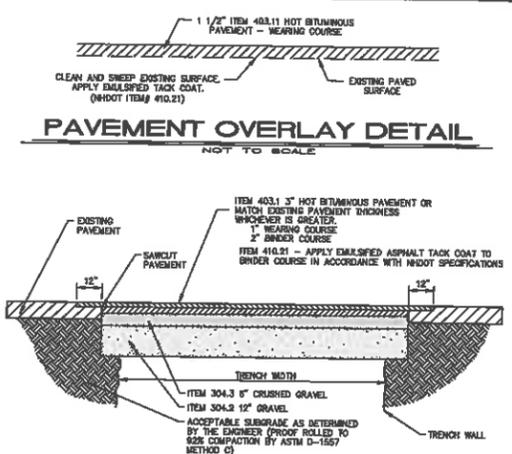
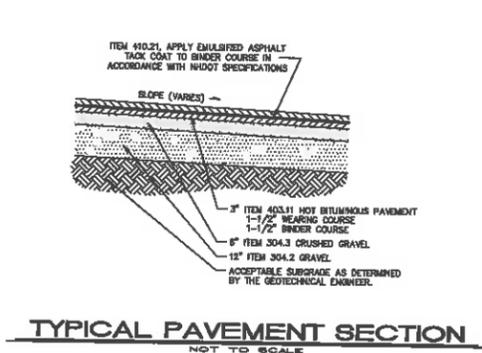
PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108

SCALE: HORIZ. 1" = 20 Feet
VERT. 1" = 4 Feet

30 JULY 2020

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Civil Engineers/Land Surveyors
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131 Middlesex Turnpike Burlington, MA 01803 (781) 263-1501
www.hisipetropoulos.com

FIELD BOOK: -- DRAWING NAME: 52920U P121 5292 6 OF 16
DRAWING LOC: V292/CVIL DWG



| SIGN LEGEND | | |
|-------------------------------|---|-------------------|
| TEXT | IDENTIFICATION NUMBER | SIZE WIDTH/HEIGHT |
| SEE MUTOS FOR TEXT DIMENSIONS | | |
| | TEXT DIMENSIONS | |
| | R1-1 | 30"/30" |
| | SEE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS | |
| | RS-1 | 30"/30" |
| | SEE 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREETS AND HIGHWAYS | |

- CONSTRUCTION NOTES:**
- ALL WORK SHALL CONFORM TO THE APPLICABLE REGULATIONS AND STANDARDS OF THE CITY OF NASHUA, AND SHALL BE BUILT IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. THE STANDARD SPECIFICATIONS FOR ROAD CONSTRUCTION, BOARD OF PUBLIC WORKS, NASHUA, NEW HAMPSHIRE, AND THE STANDARD SPECIFICATIONS FOR SEWERS AND DRAINS, BOARD OF PUBLIC WORKS, NASHUA, NEW HAMPSHIRE AND THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, APPROVED AND ADOPTED 2010 ARE HEREBY INCORPORATED BY REFERENCE.
 - ROAD AND DRAINAGE CONSTRUCTION SHALL CONFORM TO THE TYPICAL SECTIONS AND DETAILS SHOWN ON THE PLANS, AND SHALL MEET THE REQUIREMENTS AND SPECIFICATIONS FOR ROAD CONSTRUCTION, BOARD OF PUBLIC WORKS, NASHUA, NEW HAMPSHIRE, AND THE STANDARD SPECIFICATIONS FOR SEWERS AND DRAINS, BOARD OF PUBLIC WORKS, NASHUA, NEW HAMPSHIRE.
 - THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING AND DETERMINING THE LOCATION, SIZE AND ELEVATION OF ALL EXISTING UTILITIES, SHOWN OR NOT SHOWN ON THESE PLANS, PRIOR TO THE START OF ANY CONSTRUCTION. THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION, AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING "XO SAFE" AT 1-888-344-7223 AT LEAST 72 HOURS BEFORE DIGGING.
 - BLASTING, IF NEEDED, SHALL BE PERFORMED IN ACCORDANCE WITH THE CITY OF NASHUA FIRE DEPARTMENT REGULATIONS.
 - ALL STUMPS SHALL BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.
 - ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDING IMMEDIATELY UPON BEING CONSTRUCTED.
 - ALL DRAINAGE PIPE SHALL BE FURNISHED AND INSTALLED WITH FLEXIBLE GASKETS. JOINTS SHALL BE MADE WITH OIL RESISTANT COMPRESSION RINGS OF AN ELASTOMERIC MATERIAL CONFORMING TO ASTM C-443. MANUFACTURER'S INSTALLATION INSTRUCTIONS SHALL BE FOLLOWED.
 - ALL DRAINAGE PIPES SHALL BE CLASS IV 3000 D (RCP) UNLESS OTHERWISE NOTED. CATCH BASINS SHALL BE TYPE B, AND HAVE 4 FT SUMPS UNLESS OTHERWISE NOTED.
 - SEWER SHALL BE CONSTRUCTED IN ACCORDANCE WITH PLANS AND SPECIFICATIONS AND WITH THE REQUIREMENTS OF THE DEPARTMENT OF ENVIRONMENTAL SERVICES, WS & PCC AND ANY STRicter REQUIREMENTS OF DIVISION 3 - SANITARY SEWERS, OF THE STANDARD SPECIFICATIONS OF SEWERS AND DRAINS, BOARD OF PUBLIC WORKS, NASHUA, NEW HAMPSHIRE, LATEST EDITION.
 - ALL WATER LINE, HYDRANT VALVES AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE LATEST EDITION OF THE TECHNICAL SPECIFICATIONS FOR THE INSTALLATION OF MATERIALS, MAIN PIPING, SERVICE CONNECTIONS IN THE PENNICHUCK WATER WORKS FRANCHISED AREAS OF NASHUA AND MERRIMACK, NEW HAMPSHIRE.
 - SEWER SHALL BE SOLID WALL PVC UNLESS OTHERWISE REQUIRED BY THESE SPECIFICATIONS. SEWER SHALL BE LOCATED AT LEAST 10 FEET HORIZONTALLY AND 18 INCHES VERTICALLY FROM WATER LINES. WHENEVER SEWER MUST CROSS WATER MAINS, SEWER SHALL BE CONSTRUCTED AS FOLLOWS:
 - (A) SEWER PIPE SHALL BE CLASS 12 DUCTILE IRON FOR A MINIMUM DISTANCE OF 9 FEET EACH SIDE OF THE CROSSING.
 - (B) JOINTS SHALL BE MECHANICAL TYPE WATER PRESSURE RATED WITH ZERO LEAKAGE WHEN TESTED AT 25 POUNDS PER SQUARE INCH FOR GRAVITY SEWERS AND 1-1/2 TIMES WORKING PRESSURE FOR FORCE MAINS. JOINTS SHALL NOT BE LOCATED WITHIN 9 FEET OF THE CROSSING.
 - THE CONTRACTOR SHALL COORDINATE THE EXACT SIZE, LOCATION AND ELEVATION OF ALL ROOF DRAINS AND SEWER SERVICE CONNECTIONS PRIOR TO THE CONSTRUCTION OF THE BUILDING.
 - ROOF DRAIN TIERS AND DRAIN LINES WILL BE INSPECTED PRIOR TO BACKFILLING AND PAVING.
 - FOUNDATION DRAINS, IF NECESSARY, SHALL BE COORDINATED WITH THE ARCHITECT AND ENGINEER PRIOR TO CONSTRUCTION.
 - ALL TRAFFIC SIGNS SHALL CONFORM TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
 - DIMENSIONS TO CURB AND GUTTERS INDICATE EDGE OF PAVING UNLESS OTHERWISE NOTED.
 - EXISTING PAVEMENT SHALL BE SAW-CUT AS NECESSARY. CONTRACTOR SHALL ENSURE A SMOOTH TRANSITION BETWEEN NEW AND EXISTING PAVEMENT.
 - THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR EXACT BUILDING DIMENSIONS AND DETAILS.
 - THE CONTRACTOR SHALL MONITOR THE EXISTING GUARDRAIL ALONG BROAD STREET DURING CONSTRUCTION AND REPORT ANY CHANGES, IF ANY, TO THE ENGINEER.



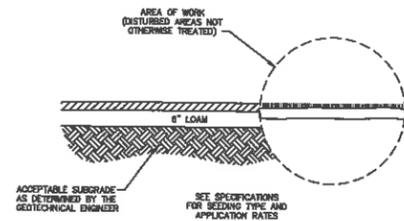
DETAIL SHEET - GENERAL SITE
(LOT 744, MAP "E")
PROPOSED CREDIT UNION BUILDING
NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108

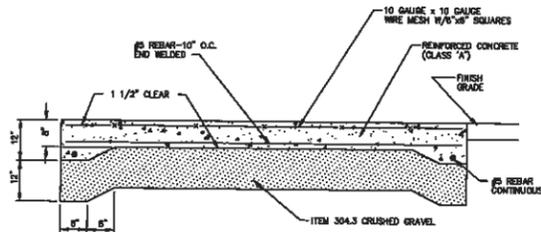
SCALE AS SHOWN
30 JULY 2020

HISI Haynor/Swanson, Inc.
Civil Engineers/Land Surveyors
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Nashua, NH 03062 Berlin, NH 03023
(603) 883-2057 (603) 263-1501
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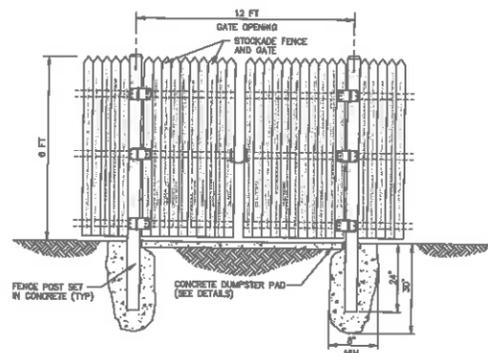
FIELD BOOK: --- DRAWING NAME: 5292CU DET1 5292 7 OF 16
DRAWING LOC: G:\5292\CIVL.DWG PLS. NUMBER SHEET



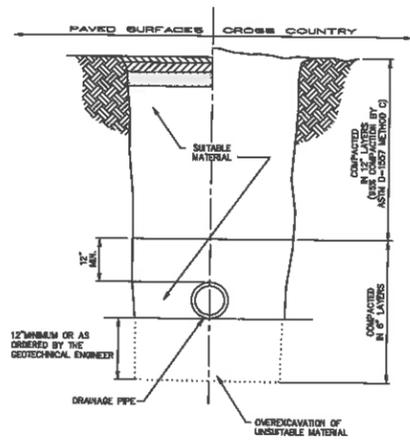
LOAM AND SEED DETAIL
NOT TO SCALE



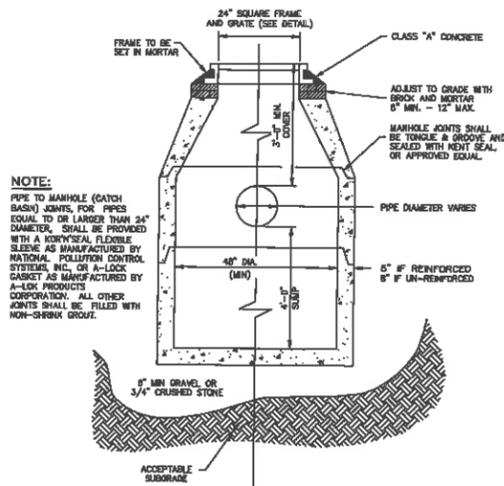
DUMPSTER PAD DETAIL
NOT TO SCALE



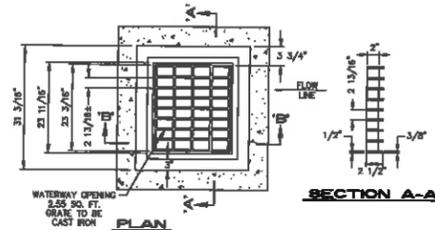
SCREEN FENCE and GATE FOR DUMPSTER PAD DETAIL
NOT TO SCALE



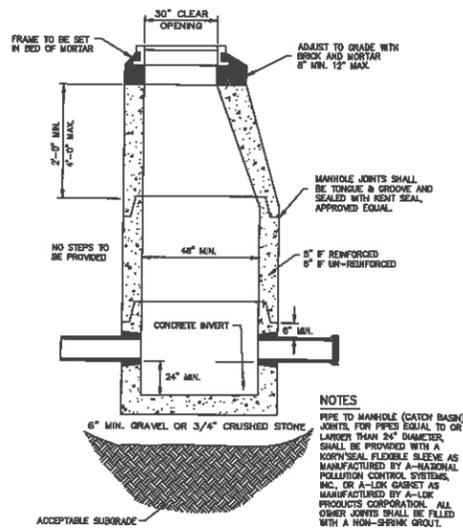
TYPICAL DRAINAGE TRENCH SECTION
NOT TO SCALE



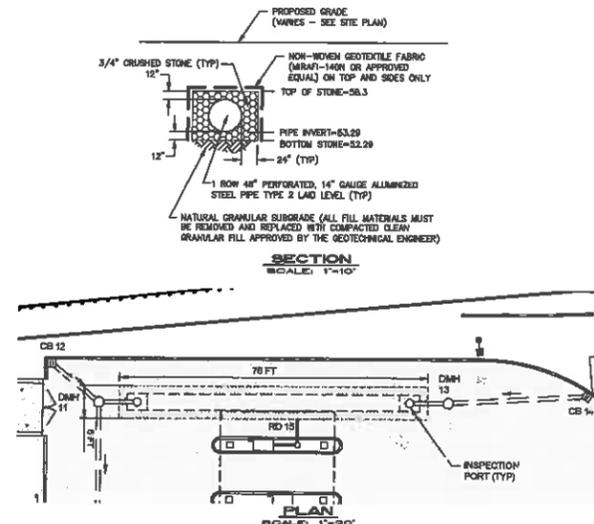
CATCH BASIN DETAIL
NOT TO SCALE



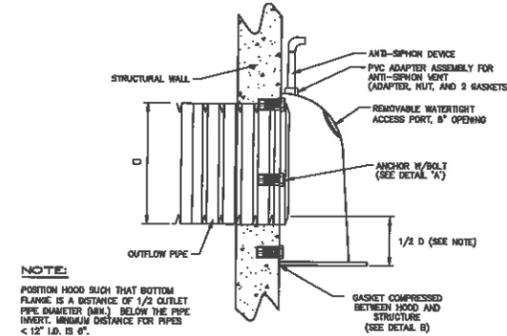
CATCH BASIN - TYPE B FRAME AND COVER DETAIL
(INDICATED STANDARD)
NOT TO SCALE



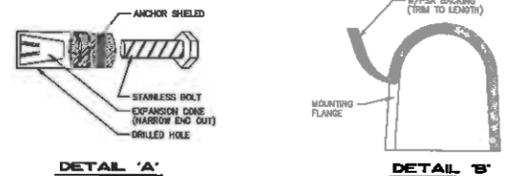
DRAIN MANHOLE DETAIL
NOT TO SCALE



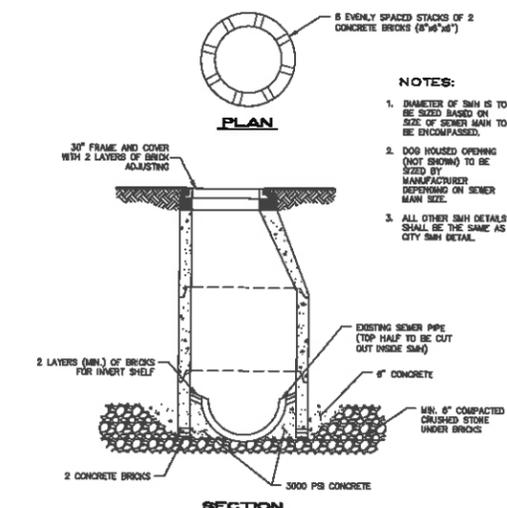
STORMWATER RECHARGE AREA 'A'
SCALE AS SHOWN



NOTE:
POSITION HOOD SUCH THAT BOTTOM FLANGE IS A DISTANCE OF 1/2 INCH OUTLET PIPE DIAMETER (MIN.) BELOW THE PIPE INVERT. MINIMUM DISTANCE FOR PIPES < 12" I.D. IS 6".

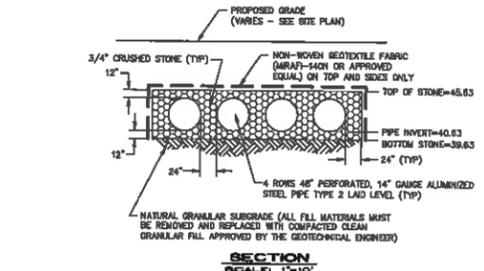


SNOUT OIL AND DEBRIS STOP DETAIL
NOT TO SCALE

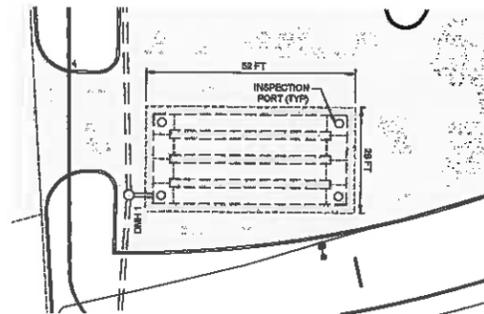


DROP OVER SEWER MANHOLE
(CITY OF NASHUA STANDARD)
NOT TO SCALE

- STORMWATER RECHARGE AREA NOTES**
1. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE PROPOSED SUBSURFACE STORMWATER MANAGEMENT AREA FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. SHOP DRAWINGS SHALL BE PREPARED BY A NEW HAMPSHIRE LICENSED PROFESSIONAL ENGINEER.
 2. DIMENSIONS OF THE PIPEFIELD ARE SUBJECT TO MANUFACTURER'S TOLERANCES.
 3. SYSTEM IS TO BE DESIGNED FOR H20 AND H25 LOADING.
 4. PRIOR TO CONSTRUCTION, THE ENGINEER SHALL WITNESS A TEST FIT AND PERFORM A PERCOLATION TEST AT THE PROPOSED STORMWATER RECHARGE AREAS. THE RESULTS SHALL BE SUBMITTED TO THE CITY OF NASHUA ENGINEERING DEPARTMENT.



STORMWATER RECHARGE AREA 'B'
SCALE AS SHOWN



STORMWATER RECHARGE AREA 'B'
SCALE AS SHOWN



| NO. | DATE | REVISION | BY |
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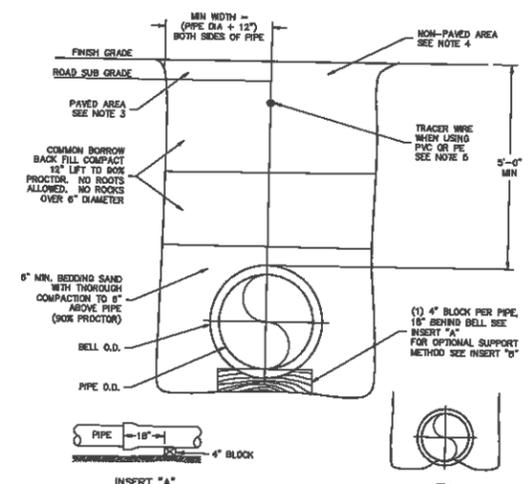
DETAL SHEET - GENERAL SITE
(LOT 744, MAP 'E')
PROPOSED CREDIT UNION BUILDING
NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108

SCALE AS SHOWN

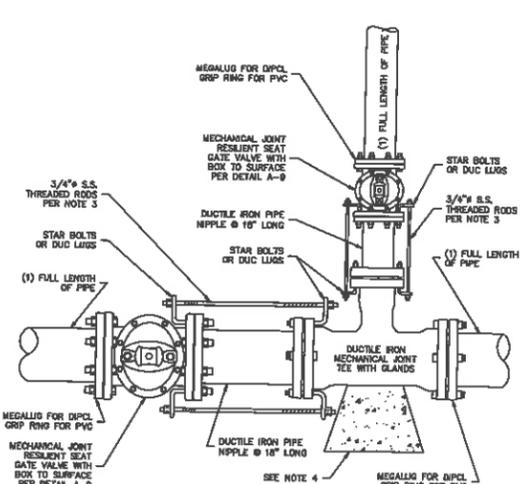
30 JULY 2020

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(603) 883-9037
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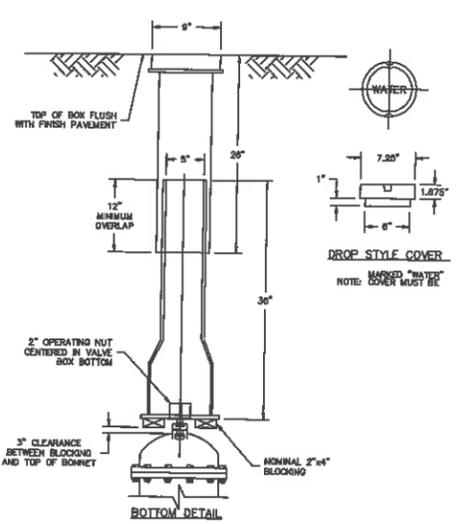
- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
 3. REQUIREMENTS FOR SUBBASE AND BASE MATERIAL TYPE ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN NON-PAVED AREAS.
 4. REQUIREMENTS FOR GRAVEL, LOAM AND/OR SEED ARE TO BE IN ACCORDANCE WITH LOCAL AUTHORITY HAVING LOCAL JURISDICTION IN NON-PAVED AREAS.
 5. 10 GALVE TRACER WIRE AS MANUFACTURED BY BMS, DIVISION OF ALBASTAR CORP., AVON, MA OR EQUIVALENT.

TYPICAL TRENCH DETAIL
NOT TO SCALE



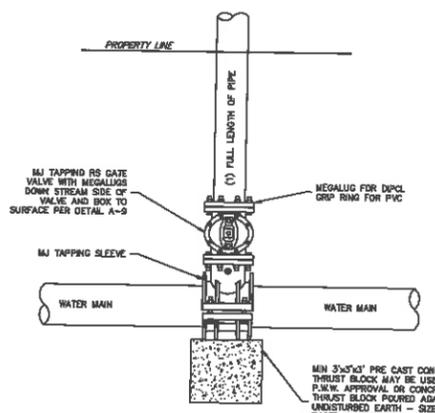
- NOTES:**
1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5' FROM TOP OF PIPE TO FINISH GRADE.
 3. 3/4" S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS. 10" FITTING OR SMALLER = (2) 3/4" S.S. RODS & ASSOC. HARDWARE. 12" FITTING OR LARGER = (4) 3/4" S.S. RODS & ASSOC. HARDWARE.
 4. MIN 3"x3"x3" PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN. SEE DETAIL A-7.

TYPICAL TEE INSTALLATION
NOT TO SCALE



- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.

TYPICAL VALVE BOX DETAIL
NOT TO SCALE

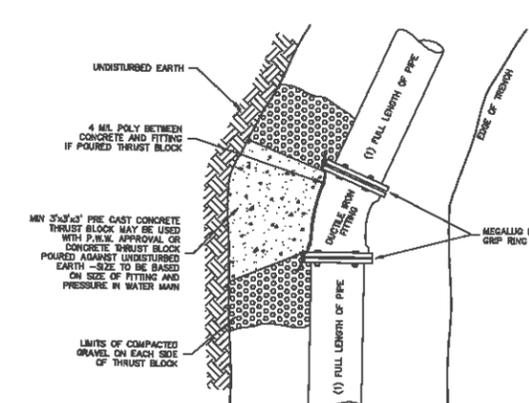


- NOTES:**
1. ALL MATERIALS AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTH OF 5' FROM TOP OF PIPE TO FINISH GRADE.
 3. SEE DETAIL A-22 FOR CROSS-SECTIONAL VIEW.

TYPICAL LARGE SERVICE AND/OR TAPPING SLEEVE DETAIL
NOT TO SCALE

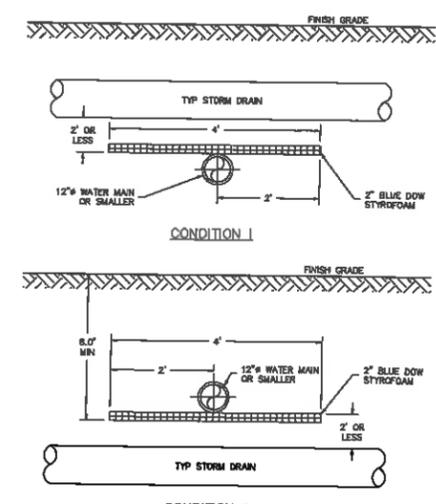
WATER NOTES

1. REFERENCE PENNACLUCK WATER WORKS SPECIFICATIONS FOR INSTALLATION OF ALL WATER LINES.
2. ALL SPRINKLER AND DOMESTIC LEADS TO BUILDING SHALL END 5'-0" OUTSIDE THE FACE OF BUILDING WALL UNLESS NOTED AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT END (FOR OTHERS TO REMOVE AND EXTEND AS NECESSARY).
3. THRUST BLOCKS AND METALLIC RESTRAINTS SHALL BE PROVIDED AT ALL HORIZONTAL BENDS, TEES, AND FIRE HYDRANTS. SEE DETAIL.
4. MINIMUM COVER ON ALL WATER LINES IS 5'-0".
5. CONTRACTOR SHALL MAINTAIN A 6"-0" HORIZONTAL (UNLESS OTHERWISE NOTED) AND 12" VERTICAL SEPARATION BETWEEN WATER SERVICE AND UTILITIES OTHER THAN SANITARY SEWER.
6. INSPECTIONS ON WATER SERVICE INSTALLATION DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE SITE CONTRACTOR AND SHALL BE COORDINATED WITH PENNACLUCK WATER WORKS, AND ALL INSPECTION FEES SHALL BE PAID BY THE CONTRACTOR.
7. CONTRACTOR SHALL HAVE BACTERIOLOGICAL AND PRESSURE TESTING PERFORMED. CONTRACTOR SHALL GIVE PENNACLUCK WATER WORKS A COPY OF RESULTS. PENNACLUCK WATER WORKS SHALL BE ON-SITE TO WITNESS TEST.
8. ALL PIPE, VALVES, MISCELLANEOUS MATERIALS AND INSTALLATION SHALL CONFORM WITH PENNACLUCK WATER WORKS SPECIFICATIONS.
9. ALL FIRE HYDRANTS, VALVES, FITTINGS, PIPES, ETC. SHALL BE IN ACCORDANCE WITH PENNACLUCK WATER WORKS REQUIREMENTS.
10. METALLIC TAPE OR DETECTOR WIRE SHALL BE INSTALLED IN THE SAME TRENCH WITH ALL NON-METALLIC PIPE SUCH THAT THE PIPE MAY BE LOCATED WITH ELECTRONIC LOCATING EQUIPMENT. DETECTOR WIRE OR METALLIC TAPE SHALL BE INSTALLED APPROXIMATELY 12" TO 18" BELOW GRADE DIRECTLY ABOVE THE TOP OF THE PIPE. DETECTOR WIRE SHALL BE 14 - GAUGE SOLID COPPER, SIMPLEX BRONZE, OR EQUAL. METALLIC TAPE SHALL BE 2" MINIMUM METALLIZED TAPE, GRIPPOLY COMPANY, INC. TUBETAPE OR EQUAL.
11. CONTRACTOR SHALL ENSURE ALL WATER VALVES ARE IN A FULLY-OPEN POSITION UPON COMPLETION OF PROJECT.
12. CONTRACTOR SHALL COORDINATE ALL WATER INTERRUPTIONS WITH THE PENNACLUCK WATER WORKS AND AFFECTED PROPERTY OWNERS.



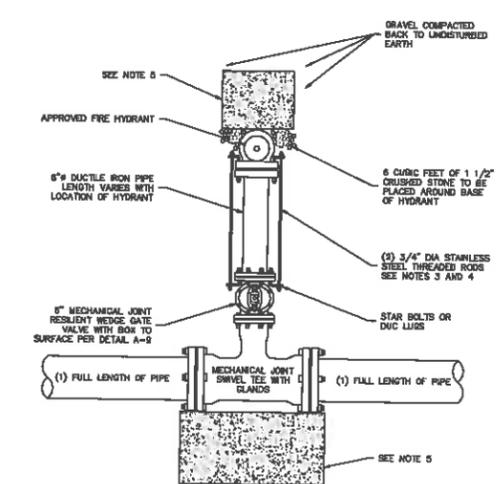
- NOTES:**
1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5' FROM TOP OF PIPE TO FINISH GRADE.
 3. 3/4" S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS. 10" FITTING OR SMALLER = (2) 3/4" S.S. RODS & ASSOC. HARDWARE. 12" FITTING OR LARGER = (4) 3/4" S.S. RODS & ASSOC. HARDWARE.
 4. MIN 3"x3"x3" PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN.

TYPICAL THRUST BLOCK BEHIND FITTINGS INSTALLATION
NOT TO SCALE



- NOTES:**
1. PENNACLUCK WATER WORKS, INC. RESERVES THE RIGHT TO MODIFY INSULATION REQUIREMENTS AS NECESSARY BASED ON FIELD CONDITIONS, ETC.
 2. THE LENGTH OR WIDTH OF INSULATION SHALL EXTEND 1 STORM DRAIN PIPE DIAMETER BEYOND THE EDGE OF STORM DRAIN PIPE IN EACH DIRECTION OR A MINIMUM OF 2' BEYOND THE CENTERLINE OF THE STORM DRAIN PIPE, WHICHEVER IS GREATER.
 3. ALL JOINT JOINT SEAMS TO BE OVERLAPPED WITH A 1' PIECE OF INSULATION CENTERED OVER SEAM.

STORM DRAIN/WATER MAIN INTERSECTING RUNS-ELEV. VIEW
NOT TO SCALE



- NOTES:**
1. ALL MATERIAL AND INSTALLATION PROCEDURES WILL CONFORM TO P.W.W. TECHNICAL SPECIFICATIONS.
 2. ALL PIPE SHOULD HAVE A MINIMUM DEPTHS OF 5' FROM TOP OF PIPE TO FINISH GRADE.
 3. 3/4" S.S. RODS SHALL BE USED IN CONJUNCTION WITH REQUIRED S.S. NUTS. RODS ARE TO BE ATTACHED TO FITTINGS WITH EITHER STAR BOLTS OR DUC LUGS. 10" FITTING OR SMALLER = (2) 3/4" S.S. RODS & ASSOC. HARDWARE. 12" FITTING OR LARGER = (4) 3/4" S.S. RODS & ASSOC. HARDWARE.
 4. WHEN DISTANCE FROM WATER MAIN TO HYDRANT IS MORE THAN 10' SUBSTITUTE METALLIC (OR GRIP RINGS) IN LIEU OF THREADED RODS.
 5. MIN 3"x3"x3" PRE CAST CONCRETE THRUST BLOCK MAY BE USED WITH P.W.W. APPROVAL OR CONCRETE THRUST BLOCK POURED AGAINST UNDISTURBED EARTH - SIZE TO BE BASED ON SIZE OF FITTING AND PRESSURE IN WATER MAIN. SEE DETAIL A-7.

TYPICAL HYDRANT INSTALLATION
NOT TO SCALE

| NO. | DATE | REVISION | BY |
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DETAIL SHEET - WATER
(LOT 744, MAP 'E')
PROPOSED CREDIT UNION BUILDING
NASHUA, NEW HAMPSHIRE

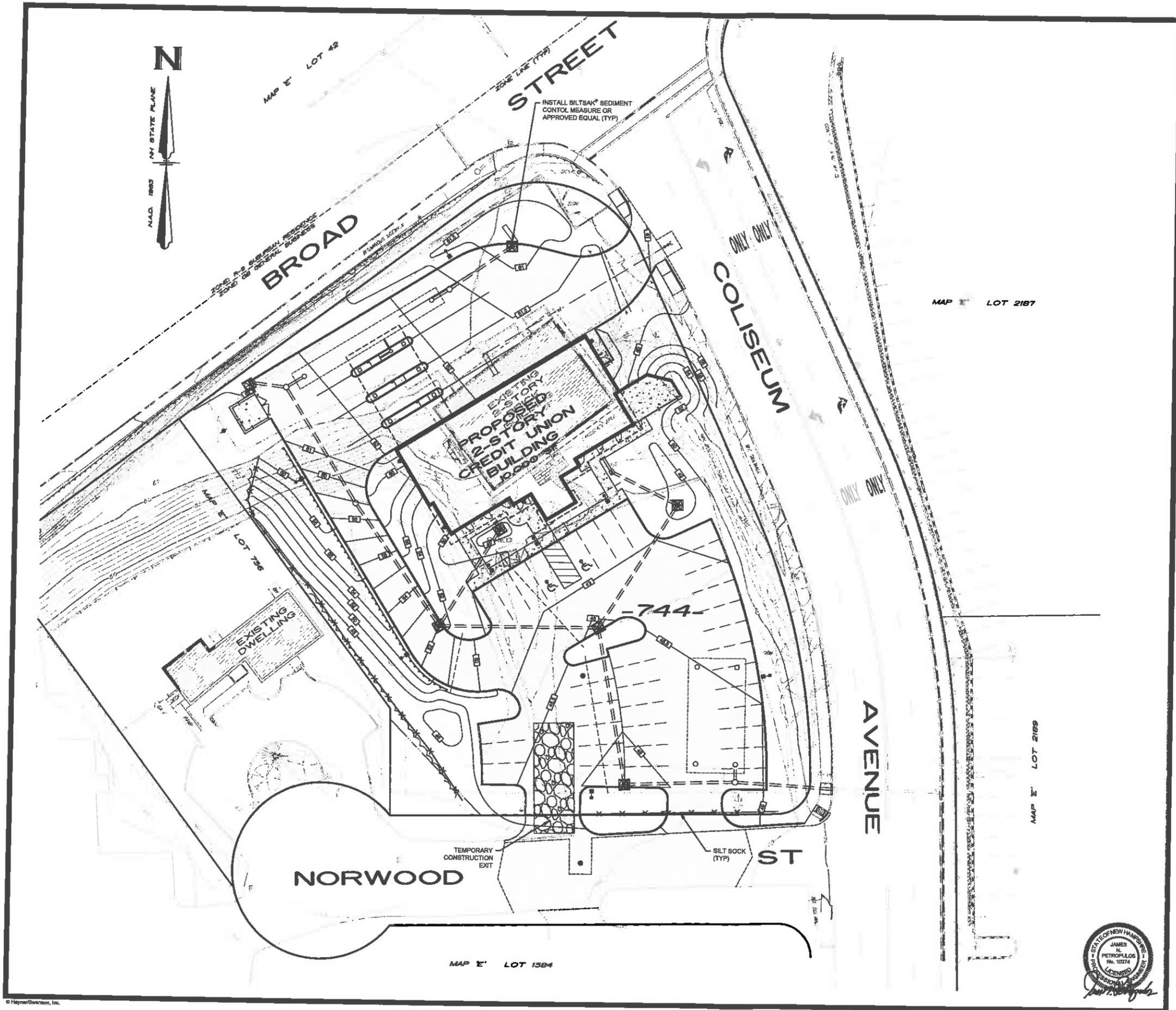
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SCALE AS SHOWN
30 JULY 2020

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FIELD BOOK: _____ DRAWING NAME: 5282CU DET1 5292 10 OF 16
DRAWING LOG: 5282 CIVIL 01W PWS Number





VICINITY MAP

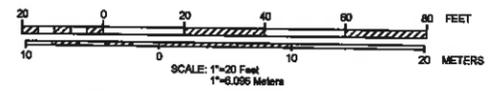
CONSTRUCTION SEQUENCE

1. CLEAR SITE ACCORDING TO PLAN.
2. CONSTRUCTION OF TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES, INCLUDING SILT FENCES, TO BE IN ACCORDANCE WITH THE PLANS.
3. GRUB SITE ACCORDING TO PLAN.
4. CUT AND DISPOSE OF ANY DEBRIS PRODUCED DURING THE CLEARING AND GRUBBING ACTIVITY.
5. SITE GRADING OF BUILDING AND PARKING AREAS. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED AFTER BEING CONSTRUCTED.
6. INSTALLATION OF UNDERGROUND UTILITIES AND SUBSURFACE STORMWATER MANAGEMENT AREAS. CATCH BASINS SHALL BE PROTECTED FROM SEDIMENT IN ACCORDANCE WITH THE SILTBAK DETAIL. THE CONTROL SHALL REMAIN UNTIL THE SITE IS SUFFICIENTLY STABILIZED.
7. AS THE BUILDING IS COMPLETED, ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED.
8. NO PORTION OF THE PROJECT SHALL BE LEFT DISTURBED AND UNSTABILIZED FOR A PERIOD OF TWO (2) MONTHS OR GREATER. ALL DISTURBED AREAS SHALL BE PERMANENTLY STABILIZED PRIOR TO WINTER CONDITIONS. STABILIZATION SHALL BE DEFINED AS 70% VEGETATIVE GROWTH BY NOVEMBER 1ST OR INSTALLATION OF EROSION CONTROL MATTING.
9. COMPLETED AREAS SHALL BE STABILIZED 72 HOURS AFTER COMPLETION.
10. FINAL PAVING OF PARKING LOT.
11. LOAM AND SEED ALL DISTURBED AREAS.
12. INSPECTION OF ALL SEDIMENT AND EROSION CONTROL MEASURES.
13. SITE LANDSCAPING ALONG WITH PERMANENT SEEDING OF ALL DISTURBED AREAS.
14. REMOVE ANY TEMPORARY EROSION CONTROL MEASURES NOT NEEDED.

| No. | DATE | REVISION | BY |
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EROSION CONTROL PLAN
(LOT 744, MAP 'E')
PROPOSED CREDIT UNION BUILDING
NASHUA, NEW HAMPSHIRE

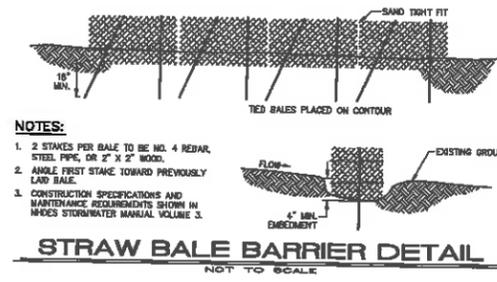
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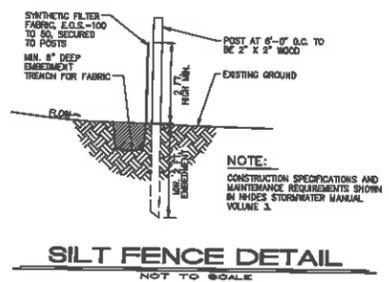
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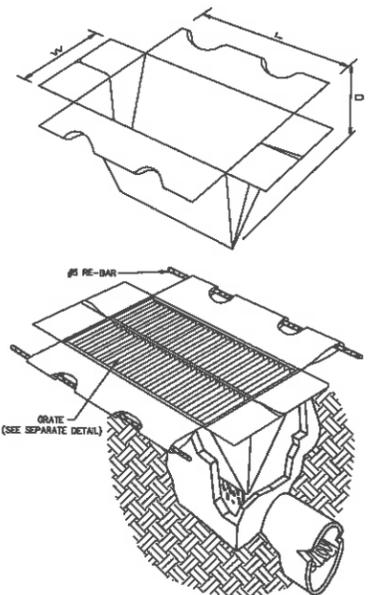




STRAW BALE BARRIER DETAIL
NOT TO SCALE



SILT FENCE DETAIL
NOT TO SCALE



SILTSAK® DETAIL
NOT TO SCALE

SILTSAK® NOTES

1. THE SILTSAK SHALL BE MANUFACTURED FROM WOVEN POLYPROPYLENE AND SEWN BY A DOUBLE NEEDLE MACHINE, USING A HIGH STRENGTH NYLON THREAD.

2. THE SILTSAK DESIGN SHALL HAVE A CERTIFIED AVERAGE WIDE WIDTH STRENGTH PER ASTM D-484 STAMENOS AS FOLLOWS:

| SILTSAK STYLE | TEST METHOD | TEST RESULT |
|---------------|-------------|--------------|
| REGULAR FLOW | ASTM D-484 | 165.0 LBS/IN |
| 1/2 FLOW | ASTM D-484 | 114.8 LBS/IN |

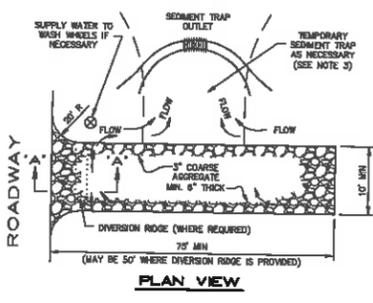
3. THE SILTSAK SHALL BE MANUFACTURED TO FIT THE OPENING OF THE CATCH BASIN OR DROP BAILEY. THE SILTSAK SHALL HAVE THE FOLLOWING FEATURES: TWO DUMP STRAPS ATTACHED AT THE BOTTOM TO FACILITATE THE EMPTYING OF THE SILTSAK. THE SILTSAK SHALL HAVE LIFTING LOOPS AS AN INTEGRAL PART OF THE SYSTEM TO BE USED TO LIFT THE SILTSAK FROM THE BANK. THE SILTSAK SHALL HAVE A RESTRAINT CORD APPROXIMATELY HALFWAY UP THE BACK TO KEEP THE SIDES AWAY FROM THE CATCH BASIN WALLS. THIS YELLOW CORD IS ALSO A VISIBLE MEANS OF INDICATING WHEN THE BACK SHOULD BE SHAPED, CLEANED, AND PLACED BACK INTO THE BASIN.

4. THE GEOTEXTILE FABRIC SHALL BE WOVEN POLYPROPYLENE FABRIC WITH THE FOLLOWING PROPERTIES:

| PROPERTY | TEST METHOD | TEST RESULT |
|------------------|-------------|---------------|
| GRAB TENSILE | ASTM D-4832 | 300 LBS |
| GRAB ELONGATION | ASTM D-4831 | 20% |
| PLUCKING | ASTM D-4833 | 120 LBS |
| MULLEN BURST | ASTM D-3708 | 300 PSI |
| TRAPEZOID TEAR | ASTM D-4833 | 120 LBS |
| UV RESISTANCE | ASTM D-4552 | 80% |
| APPARENT OPENING | ASTM D-4741 | 40 US SIEVE |
| FLOW RATE | ASTM D-4401 | 40 GAL/MIN/FT |
| PERMITTIVITY | ASTM D-4491 | 0.55 SEC |

OR SILTSAK 1/2-FLOW

| PROPERTY | TEST METHOD | TEST RESULT |
|------------------|-------------|----------------|
| GRAB TENSILE | ASTM D-4832 | 286 LBS |
| GRAB ELONGATION | ASTM D-4831 | 20% |
| PLUCKING | ASTM D-4833 | 134 LBS |
| MULLEN BURST | ASTM D-3708 | 420 PSI |
| TRAPEZOID TEAR | ASTM D-4833 | 46 LBS |
| UV RESISTANCE | ASTM D-4552 | 80% |
| APPARENT OPENING | ASTM D-4741 | 20 US SIEVE |
| FLOW RATE | ASTM D-4401 | 200 GAL/MIN/FT |
| PERMITTIVITY | ASTM D-4491 | 1.5 SEC |



TEMPORARY GRAVEL CONSTRUCTION EXIT
NOT TO SCALE

GENERAL NOTES

- ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH STANDARDS AND SPECIFICATIONS THEREOF IN NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES STORMWATER MANUALS, VOLUME 1-3, LATEST EDITION.
- THE WORK AREA SHALL BE GRADED, SHAPED, AND OTHERWISE DRAINED IN SUCH A MANNER AS TO MINIMIZE SOIL EROSION, STABILIZATION OF DRAINAGE CHANNELS, DAMAGE TO EXISTING VEGETATION, AND DAMAGE TO PROPERTY OUTSIDE THE LIMITS OF THE WORK AREA. SILT FENCES, STRAW BALES AND/OR DETENTION BASINS WILL BE NECESSARY TO ACCOMPLISH THIS END.
- STRIPPED TOPSOIL SHALL BE STOCKPILED, WITHOUT COMPACTION, AND STABILIZED AGAINST EROSION IN ACCORDANCE WITH TEMPORARY STABILIZATION OF DISTURBED AREAS, AS OUTLINED IN NOTE NO. 4.
- TEMPORARY STABILIZATION OF DISTURBED AREAS:
SEED BED PREPARATION: 10-18 PER FERTILIZATION TO BE SPREAD AT THE RATE OF 7 LBS PER 1,000 SF AND AGRICULTURAL LIMESTONE AT A RATE OF 30 LBS PER 1,000 SF AND INCORPORATED INTO THE SOIL. THE SOIL, FERTILIZER AND LIMESTONE SHALL BE TILLED TO PREPARE FOR SEEDING.
A. SEED MIXTURE: USE ANY OF THE FOLLOWING:

| SPECIES | RATE PER 1,000 SF | DEPTH | SEEDING DATES |
|------------------|-------------------|-------|----------------|
| WINTER RYE | 2.5 LBS | 1" | 08/15 TO 09/15 |
| ORTS | 2.5 LBS | 1" | 04/15 TO 05/15 |
| ANNUAL RYE GRASS | 1.0 LBS | 0.25" | 08/15 TO 09/15 |

 B. MULCHING: MULCH SHOULD BE USED ON HIGHLY ERODIBLE AREAS, AND WHERE CONSERVATION OF MOISTURE WILL FACILITATE PLANT ESTABLISHMENT AS FOLLOWS:

| TYPE | RATE PER 1,000 SF | USE & COMMENTS |
|-----------------------------------|---------------------------------------|---|
| STRAW | 70 TO 80 LBS | MAY BE USED WITH PLANTINGS, MUST BE ANCHORED TO BE USED ALONE |
| WOOD CHIPS OR BARK MULCH | 480 TO 620 LBS | USED WITH TREE AND SHRUB PLANTINGS |
| FIBROUS MATTING | AS RECOMMENDED BY MANUFACTURER | MUST BE BIODEGRADABLE, USE IN SLOPE AREAS AND AREAS DIFFICULT TO VEGETATE |
| CRUSHED STONE 1/4" TO 1 1/2" DIA. | SPREAD TO GREATER THAN 1/2" THICKNESS | USE IN SPECIFIC AREAS AS SHOWN ON PLAN OR AS NEEDED. |
- PERMANENT STABILIZATION OF DISTURBED AREAS:
 A. ALL ROADWAYS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
 B. ALL CUT AND FULL SLOPES SHALL BE SEEDING/PLANTED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
 C. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 3 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED.
 D. AN AREA SHALL BE CONSIDERED STABILIZED IF ONE OF THE FOLLOWING HAS OCCURRED:
 1. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED.
 2. A MINIMUM OF 80% VEGETATED GROWTH HAS BEEN ESTABLISHED.
 3. A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED.
 4. OR, EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
 E. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
 F. SITE LOCATION:
 42° 45' 58" N LATITUDE, 71° 27' 58" W LONGITUDE (PER GOOGLE EARTH)
 G. TOTAL AREA OF DISTURBED SOIL: 20,826 sq. ft.
 H. REFERENCE IS MADE TO THE LATEST EDITION OF THE FEDERAL REGISTER (48 FR 7857), ENVIRONMENTAL PROTECTION AGENCY NPDES GENERAL PERMITS FOR STORMWATER DISCHARGES FROM CONSTRUCTION ACTIVITIES. FOR ADDITIONAL INFORMATION CONTACT (202) 656-9545 OR www.epa.gov/npdes/stormwater.
 I. THE ENTIRE CONTENTS OF THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) SHALL BE RETAINED ON-SITE FOR THE DURATION OF THE CONTRACT AND BE MADE AVAILABLE TO LOCAL, STATE AND FEDERAL CODE ENFORCEMENT PERSONNEL.

WINTER CONDITION NOTES

- ALL PROPOSED POST-DEVELOPMENT VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 80% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE. SECURED WITH ANCHORED NETTING, ELSEWHERE. THE PLACEMENT OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 80% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3-INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3.

SITE MAINTENANCE/INSPECTION PROGRAM

THE FOLLOWING PROVIDES AN ITEMIZATION OF SPECIFIC SITE MAINTENANCE PRACTICES THAT WILL BE EMPLOYED ON THE SITE TO MINIMIZE POLLUTANT GENERATION AND TRANSPORT FROM THE SITE. THE SITE MAINTENANCE PROGRAM INCLUDES ROUTINE INSPECTIONS, PREVENTATIVE MAINTENANCE AND "GOOD HOUSEKEEPING" PRACTICES.

ROUTINE INSPECTIONS

- THE CONTRACTOR SHALL INSPECT ALL CONTROL MEASURES AT LEAST ONCE A WEEK AND WITHIN TWELVE (12) HOURS OF THE END OF A STORM WITH RAINFALL AMOUNT GREATER THAN 0.5 INCHES. THE INSPECTIONS WILL VERIFY THAT THE STRUCTURAL BMPs DESCRIBED IN THE PLANS ARE IN GOOD CONDITION AND ARE MINIMIZING EROSION. A MAINTENANCE INSPECTION REPORT WILL BE MADE WITH EACH INSPECTION. COMPLETED INSPECTION FORMS SHALL BE KEPT ON-SITE FOR THE DURATION OF THE PROJECT. FOLLOWING CONSTRUCTION, THE COMPLETED FORMS SHALL BE RETAINED AT THE CONTRACTOR'S OFFICE FOR A MINIMUM OF ONE YEAR.

PREVENTATIVE MAINTENANCE

- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTENANCE OF ALL TEMPORARY AND PERMANENT CONTROLS THROUGHOUT THE DURATION OF THIS CONTRACT. MAINTENANCE PRACTICES SHALL INCLUDE, BUT ARE NOT LIMITED TO,
- CLEANING OF CATCH BASINS TWICE PER YEAR OR MORE FREQUENTLY AS DICTATED BY QUARTERLY INSPECTIONS.
 - CLEANING OF SEDIMENT AND DEBRIS FROM STORMWATER MANAGEMENT AREA FOREBAY TWICE PER YEAR OR MORE FREQUENTLY AS DICTATED BY MONTHLY INSPECTIONS.
 - IMPLEMENTATION OF OTHER MAINTENANCE OR REPAIR ACTIVITIES AS DEEMED NECESSARY BASED UPON WEEKLY INSPECTIONS.
 - REMOVAL OF BUILT UP SEDIMENT ALONG SILT FENCES AND/OR STRAW BALE BARRIERS.
 - REMOVAL OF BUILT UP SEDIMENT IN BOTH TEMPORARY AND PERMANENT CONTROLS SUCH AS GRASS SWALES, SEDIMENT FOREBAYS AND RECHARGE/DETENTION BASINS.
 - RECONSTRUCTING THE TEMPORARY GRAVEL CONSTRUCTION EXIT IF NOT WORKING PROPERLY.
 - TREATMENT OF NON-STORM WATER DISCHARGES SUCH AS WATER FROM WATER LINE FLUSHINGS OR GROUNDWATER FROM DEWATERING EXCAVATIONS. SUCH FLOWS SHOULD BE DIRECTED TO A TEMPORARY SEDIMENTATION BASIN OR STORMWATER MANAGEMENT AREA.
 - SWEEP PARKING LOTS AND DRIVES REGULARLY TO MINIMIZE SEDIMENT ACCUMULATION. FREQUENCY SHALL VARY SEASONALLY ACCORDING TO SEDIMENT ACCUMULATION ON PAVED SURFACES (E.G., MORE FREQUENT SWEEPING DURING THE WINTER AND SPRING).

GOOD HOUSEKEEPING PRACTICES

- THE CONTRACTOR SHALL EMPLOY MEASURES AND PRACTICES TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS TO STORM AND WATER RUNOFF. THE CONTRACTOR SHALL PAY SPECIAL ATTENTION TO THE HANDLING, USE AND DISPOSAL OF MATERIALS SUCH AS PETROLEUM PRODUCTS, FERTILIZERS AND PAINTS TO ENSURE THAT THE RISK ASSOCIATED WITH THE USE OF THESE PRODUCTS IS MINIMIZED. THE FOLLOWING "GOOD HOUSEKEEPING" PRACTICES SHALL BE FOLLOWED DURING CONSTRUCTION OF THE PROJECT:
 A. AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCT REQUIRED TO DO THE JOB.
 B. ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR APPROPRIATE CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE.
 C. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THEIR MANUFACTURER'S LABELS.
 D. WHENEVER POSSIBLE, ALL OF A PRODUCT SHALL BE USED BEFORE DISPOSING OF THE CONTAINER.
 E. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
 F. THE CONTRACTOR SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.

SPILL PREVENTION AND CLEANUP PRACTICES

- MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP WILL BE CLEARLY POSTED AND SITE PERSONNEL WILL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES.
- MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP WILL BE KEPT IN THE MATERIAL STORAGE AREA ON-SITE. EQUIPMENT AND MATERIAL WILL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, ROPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST, AND PLASTIC AND METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE.
- ALL SPILLS WILL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY.
- THE SPILL AREA WILL BE KEPT WELL VENTILATED AND PERSONNEL WILL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE.
- SPILLS OF TOXIC OR HAZARDOUS MATERIAL WILL BE REPORTED TO THE APPROPRIATE STATE OR LOCAL GOVERNMENT AGENCY, REGARDLESS OF THE SIZE.
- THE SPILL PREVENTION PLAN WILL BE ADJUSTED TO INCLUDE MEASURES TO PREVENT THIS TYPE OF SPILL FROM REOCCURRING AND HOW TO CLEAN UP THE SPILL IF THERE IS ANOTHER ONE. A DESCRIPTION OF THE SPILL, WHAT CAUSED IT, AND THE CLEANUP MEASURES WILL ALSO BE INCLUDED.

| NO. | DATE | REVISION | BY |
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DETAIL SHEET - EROSION CONTROL
(LOT 744, MAP 'E')
PROPOSED CREDIT UNION BUILDING
NASHUA, NEW HAMPSHIRE

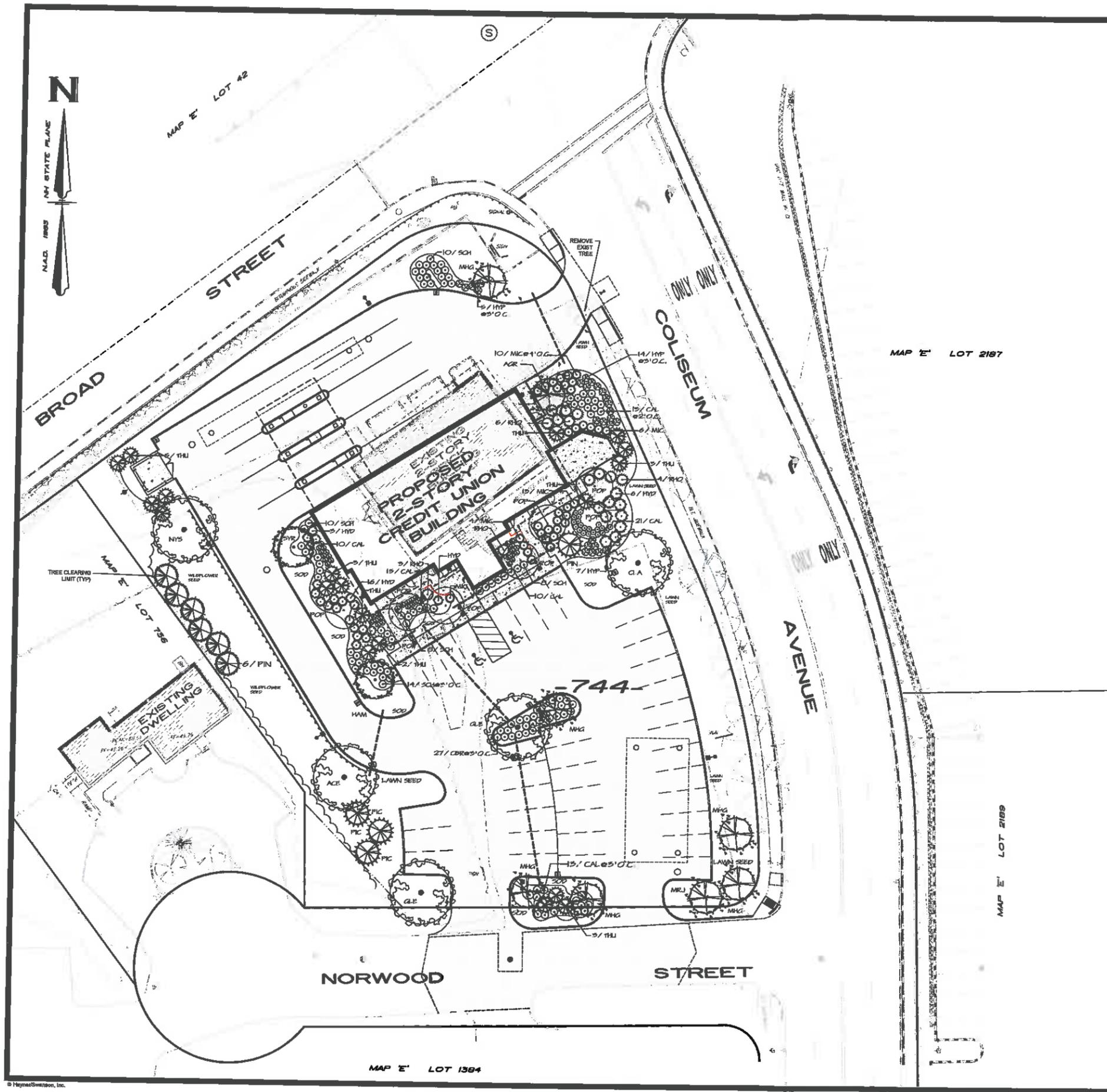
PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108

SCALE AS SHOWN

30 JULY 2020

HISI Haynes/Swanson, Inc.
Civil Engineers/Land Surveyors
3 Congress Street
Nashua, NH 03003
(603) 883-2057
www.haynes-swanson.com





PLANT MATERIAL LIST

| | | |
|---|---|--------------------|
| 1/ ACE | ACER RUBRUM (RED SUNSET MAPLE) | 2.5"-3" CAL. |
| 1/ AGR | ACER GRiseum (PAPERBARK MAPLE) | 10'-12' MULTI-STEM |
| 82/ CAL | CALAMAGROSIS A. (OVERDAM FEATHER REED) | # 2GAL. |
| 27/ CBR | CALAMAGROSIS BRACHYTRICHA (KOREAN FEATHER REED) | # 1GAL. |
| 2/ GLE | GLEDITSIA T. I. (HALKA HONEYLOCUST) | 2.5"-3" CAL. |
| 1/ HAM | HAMAMELIS VIRGINIANA (COMMON WITCHAZZEL) | 7'-8' DB |
| 27/ HYD | HYDRANGEA QUERCIFOLIA (RUBY SLIPPERS OAKLEAF) | 2.5"-3" DB |
| 25/ HYP | HYPERICUM KALMIANUM (AMES ST. JOHNSWORD) | # 2GAL. |
| 5/ MHG | MALUS SPECIES (HARVEST GOLDORAPPLE) | 2.5"-3" CAL. |
| 54/ MIC | MICROBIOTA DEPRESSATA (RUSSIAN CYPRESS) | # 5GAL. |
| 1/ MRJ | MALUS SPECIES (RED JADE CRABAPPLE) | 2.5"-3" CAL. |
| 2/ NYS | NYSSA SYLVATICA (TUPELO & WILDPIRE) | 2.5"-3" CAL. |
| 1/ PIT | PINUS THUNDERGIANA (THUNDERHEAD JAPANESE PINE) | 6'-7' DB |
| 3/ PIC | PICEA GLAUCA (WHITE SPRUCE) | 7'-8' DB |
| 6/ PIN | PINUS STROBUS (WHITE PINE) | 6'-7' DB |
| 8/ POP | POPULUS TREMULOIDES (MOUNTAIN SENTINEL ASPEN) | 2"-2.5" CAL. |
| 12/ RHO | RHODODENDRON (WHITE CATAMBA RHODODENDRON) | # 7GAL. |
| 61/ SCH | SCHIZACHYLIUM ACOPARILIUM (THE BULES BLUESTEM) | # 1GAL. |
| 2/ SYR | SYRINGA RETICULATA (IVORY SILK JAPANESE TREE LILAC) | 3"-3.5" CAL. |
| 19/ THU | THUJA OCCIDENTALIS (TECHNY MISSION ARBORVITAE) | 7'-8' DB |
| MISCELLANEOUS: | | |
| SOD | | PER PLAN |
| GENERAL LAWN SEED (BLUE SEAL 'EZ GREEN' #1LD./ 2005F.) | | PER PLAN |
| PREMIUM BLEND PINE BARK MULCH (DO NOT USE TINTED MULCH) | | 4" SETTLED |
| PLANT LIST REVISED: 7/28/20 | | |

| NO. | DATE | REVISION | BY |
|-----|------|----------|----|
| | | | |

LANDSCAPE PLAN
(LOT 744, MAP 'E')

PROPOSED CREDIT UNION BUILDING
NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108

SCALE: 1"=20 Feet
1"=6.096 Meters

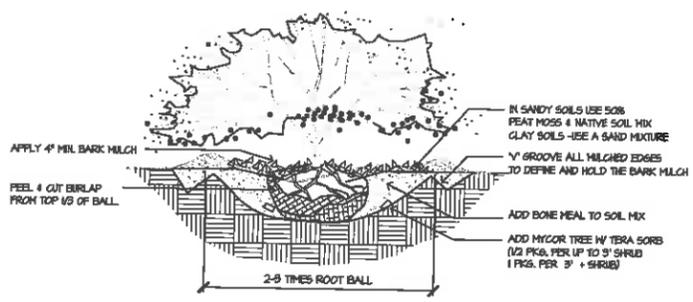
30 JULY 2020

PREPARED BY:
BLACKWATER DESIGN
PIKING (603) 680-6000 FAX (603) 648-6006
Land Planning - Landscape Architecture
85 Front Lane - Webster, NH 03303

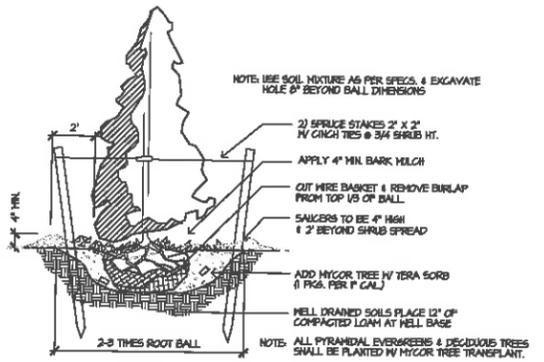
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| FIELD BOOK: --- | DRAWING NAME: 5282CU LSE1 | 5292 | 13 OF 16 |
| DRAWING LOG: G:\8882\01\1.DWG | | | |

General Specifications

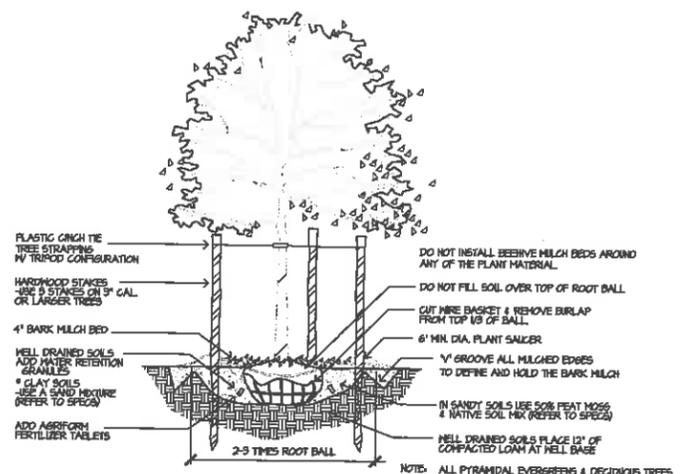
- The contractor shall at his expense furnish all the materials, supplies, machinery, equipment, tool, superintendent, labor, insurance, & other accessories and services necessary to complete the said project within the unit costs stated within the bid price.
- The work to be done under this contract is as shown and described on the drawings. Each bidder shall make a careful examination of the plans and specifications (the plan shall dictate quantities) and acquaint himself with all conditions before making his proposal. He will be held responsible for errors in his proposal resulting from his failure to make such an examination. All bidders shall visit the site and inform themselves of all conditions.
- The bids shall be based on materials and equipment complying with the drawings and the specifications. The contractor shall be responsible under this contract price, for furnishing and installing materials conforming to the bid items. Under no circumstances may a species 'hybrid' be substituted or size changed without written consent of the landscape architect.
- The contractor shall be responsible for the protection of such existing utilities as water mains, sewer systems, gas mains, electrical conduits, telephone lines and any other utilities and if any damage or destruction may occur to these utilities, he shall be responsible for their repair and/or replacement at his expense.
- The contractor shall make payment for all damages to buildings, structures, trees, shrubs and/or any other property outside the construction area or located within those limits but not designated for removal or reconstructed providing such damage shall result from accident caused by negligence for which the contractor shall be legally liable.
- If additional labor and/or materials is requested or required, the contractor shall submit a price to the owner. If the owner approves the price he shall prepare a change order for approval and signature. The contractor shall not proceed without a written authorization from the owner for the additional work. If the contractor proceeds with the additional work without this authorization he shall forfeit any claim for additional compensation.
- The landscape architect shall reserve the right to inspect the project work at any time deemed necessary to insure that the specifications and plans and any other contract documents are being followed.
- The L.A. shall have the right to reject any plant on-site based upon condition, size, or incorrect species or hybrid. LA must be contacted prior to install, to inspect materials delivered to the site, and to insure that soil amendments, bark mulch, roof ballast, etc. are to the written specifications.
- All seeded areas shall receive a minimum 6" topsoil blanket (by site contractor) site preparation, raking and general clean up prior to application. Operations shall include a preemergence type herbicide, 12-25-12 granular fertilizer @ 10 lbs./1000 sq. ft., and pelletized limestone @ 25 lbs./1000 sq. ft. power raked into the top 2" of soil prior to hydro-seeding. Ratios & application rates may change based upon the required soil analysis.
- Contractor is responsible for establishing a thick, weed free lawn. Seed shall be spread @ 4lbs./1000. Lawn germination shall be 95% free of noxious weeds for acceptance. Define differences in seed mixes (if applicable) with irrigation flagging until 2nd mowing. Site review by LA is required.
- Review of the installed irrigation system by the designer is required prior to release of final payment.
- Hydroseeding operations shall be a one part process with a paper fiber mulch; a tackifier shall be applied on all slopes greater than 3:1. Excelsior Drainage mat shall be applied to all 2:1 slopes and drainage swales per plan.
- Contractor shall maintain, from acceptance date, the lawn areas through the first mowing. Contractor is not responsible for the first mowing.
- All plant materials shall be installed in accordance with A.L.C.C. Trees and shrubs shall have appropriate soil mixtures, fertilizer and soil retention granules.
- If the soil conditions are extremely sandy, all trees shall have a 6" layer of compacted topsoil (verify with Landscape Architect) placed in the base of the plant pit as a moisture retention layer. The plant pit sidewalls shall be over excavated by an additional 12" beyond the normal outside radius of the hole. A topsoil planting mixture shall be used to backfill as per spec # 22.
- Landscape architect shall have the right to reject and have ground removed any plant material not of proper size or of weak quality, i.e. thin, no lower branching, etc. Contractor must submit shipping lists (billing invoices) for verification, prior to installation.
- All plant material shall be guaranteed for a period of one (1) year from date of installation. Any material which dies or does not show a healthy appearance within this time shall be replaced at the contractor's expense; with same warranty requirements as the original. Warranty does not cover loss due mechanical damage, i.e. snow storage. Contractor should protect susceptible species from insect infestation. Use a liquid systemic application on birch, etc.
- Plant beds and saucers vary in dia. (refer to dwg). Trees and shrubs shall receive a 4" (settled) covering of pine/hamlock bark mulch; saucer diameters per drawing & details. Deciduous trees shall have a 6' dia. saucer (typ.), evergreen trees shall have a saucer 2' min. beyond it's outer branches. All edges shall have a "V" groove.
- All B&B material which are encased in wire baskets shall have the wires cut loose and the top third removed prior to backfill operation.
- If road base is encountered in any plant bed areas, i.e. parking islands, it shall be removed and suitable amended soil installed per drawings and specifications.
- Soil planting mixture shall be a 6%-10% organic topsoil, amended with 10% wood ash, 10% manure, & 30% peatmoss or incorporate a dehydrated compost material. If planting in sand, gravel or other well drained soils, a 50% peatmoss to excavated soil. Other soil amendments shall include; Agriform tablets, Hydro-Gel or equal, and Roots growth enhancer to all trees and shrubs listed, per manufacturers specifications. All plant material pits will receive a min. 20% in volume mix of a compost soil amendment. Submittal required. 'Roots' STEP 1 can be substituted for the Individual supplements. Install per manufacturer's specs.
- Landscape contractor shall not be responsible for topsoil spreading but shall coordinate with the site contractor adherence to the mound grades, plant bed soil depths and soil type per dwgs & spec. Landscape contractor shall power rake-out for seed.
- Landscape contractor shall provide a soil analysis of the topsoil planting mixture. Analysis to show soil classification (min. sandy loam) and nutrients.
- Contractor shall protect all B&B materials left above grade prior to installation from drying out. All plants shall be stored, covered in mulch, and irrigated until planted. Any plant left on the ground and whose outer ball surface dries out, shall be rejected by the landscape architect. Plants stored in shade and off pavement.
- Plan dictates, contractor shall alert Landscape Architect if any discrepancies exist between the plan, the material list, and as-built site conditions.
- Installer shall notify landscape architect prior to planting, to review plant locations and bedline configurations. If contractor installs without the placement approval of the L.A., said architect shall have the right to relocate any installed plants at the contractor's expense.
- Installer shall notify landscape architect prior to plant installation to review all materials. Any plants of poor condition, improper size, or species will be rejected.
- Upon one year review, contractor shall straighten any trees that have shifted. Any weak or bare spots in lawn shall be reseeded.
- All bedlines shall have a deep "V" groove to define lawn to mulch edge. No "Beehive" mounding of mulch is allowed, also keep mulch away from base of perennials.
- Do not plant materials too close to the edge of bedlines. Refer to drawings for center of plant to bedline. At a minimum no outer branching of a shrub or perennial shall be closer than two feet from the bedlines. If the as-built does not comply contractor shall adjust the plant location or bedline at his expense.
- Seed mixes include: Sandy Soil Lawn Mix by: deercreekseed.com; New England Wetland Plants, Amherst, Ma. refer to planting plan for designations.
- Any items not completed to the specifications will be required at contractor's expense prior to final approvals. Contractor is to bid the work according to the specifications and not to what they may do under their standard practices. Special attention will be paid to soils, amendments, guy stakes, bedlines & saucer configurations, seed mixtures, etc.
- Certain designated foundation edging is road ballast (washed rounds, non-crushed, natural) Size of stone is a range of 3/4"-1.5" dia. placed to a depth of 3", upon placement apply a coating of granular Preen (preemergent).
- Any questions concerning this drawing shall be directed to Joseph Hochrein c/o Blackwater Design, 85 Frost Lane, Webster, NH 03303, 603-648-2541.



B&B SHRUB PLANTING
NOT TO SCALE

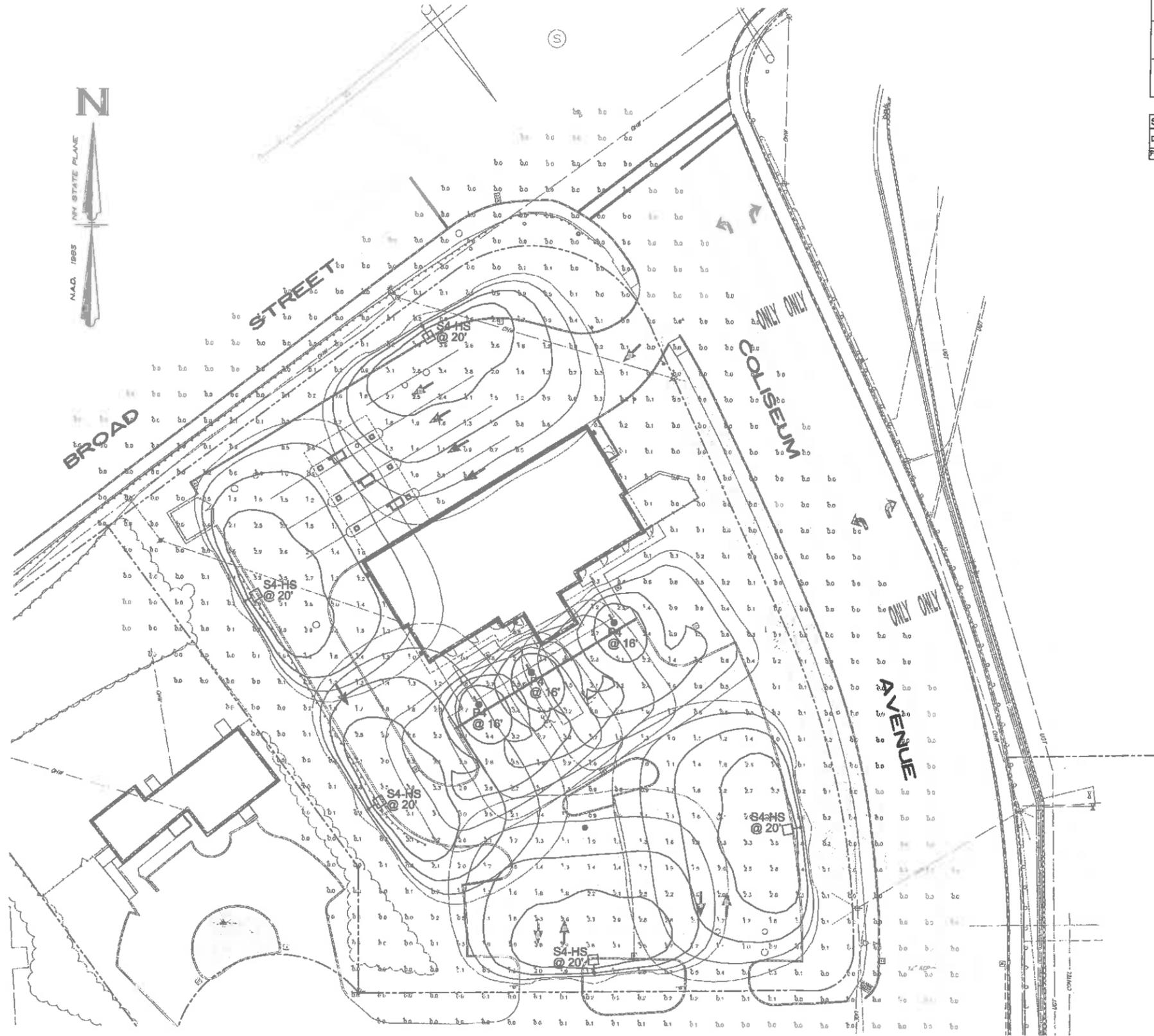


PYRAMIDAL EVERGREEN TREE PLANTING
NOT TO SCALE



TREE PLANTING 2\"/>NOT TO SCALE

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|---|----------------------------|----------|----------|--|
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| No. | DATE | REVISION | BY | |
| <p>DETAIL SHEET - LANDSCAPE (LOT 744, MAP 'E')</p> <p>PROPOSED CREDIT UNION BUILDING NASHUA, NEW HAMPSHIRE</p> <p>PREPARED FOR/RECORD OWNER GRANITE STATE CREDIT UNION 1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108</p> <p>SCALE: 1"=20 Feet 1"=6.096 Meters</p> <p>30 JULY 2020</p> <p>PREPARED BY: BLACKWATER DESIGN PHONE (603) 648-6500 FAX (603) 648-6506 Land Planning - Landscape Architecture 85 Frost Lane - Webster, NH 03303</p> | | | | |
| FIELD BOOK | DRAWING NAME: 529201V LS21 | 5292 | 14 OF 16 | |
| DRAWING LOC: G:\5292\CIVIL.DWG | | | | |

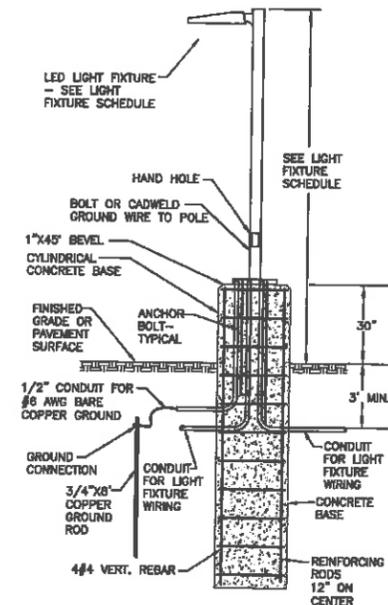


PHOTOMETRIC SITE PLAN
SCALE: 1" = 20'-0"

| Symbol | Label | QTY | Catalog Number | Description | Lamp | Number Lamps | Lumens per Lamp | LLF | Wattage |
|--------|-------|-----|---|---|------|--------------|-----------------|-----|---------|
| □ | S4-HS | 5 | GLEON-AF-02-LED-E1-SL4-7030-HSB/BSA4209FN1 | EATON MCGRAW-EDISON AREASITE POLE LIGHT WITH TYPE 4 DISTRIBUTION WITH SPILL CONTROL, 20-FT SQUARE STRAIGHT STEEL POLE | LED | 1 | 7,374 | - | 113 |
| ● | P4 | 3 | ECM-E02-LED-E1-SL4-SO-BL-BK-7030/SA6164-BK/STL164SR54BK | EATON EPIC MEDIUM DECORATIVE/SITE POLE LIGHT WITH TYPE 4 DISTRIBUTION WITH SPILL CONTROL, 16-FT DECORATIVE POLE | LED | 1 | 5,647 | - | 52 |

| Statistics Area 1 | | | | | |
|------------------------|---------|--------|--------|---------|---------|
| Description | Avg | Max | Min | Avg/Min | Max/Min |
| Front Parking Lot Only | 1.99 fc | 4.4 fc | 0.6 fc | 3.88 | 8.80 |

| Statistics Area 2 | | | | | |
|------------------------------|---------|--------|--------|---------|---------|
| Description | Avg | Max | Min | Avg/Min | Max/Min |
| Side Drive and Drive Up Area | 1.91 fc | 3.8 fc | 0.6 fc | 3.82 | 7.80 |



POLE BASE DETAIL
N.T.S.

| NO. | DATE | REVISION | BY |
|-----|------|----------|----|
| | | | |

PHOTOMETRIC LIGHTING PLAN
(LOT 744, MAP "E")
PROPOSED CREDIT UNION BUILDING
NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108

SCALE: 1"=20' Feet
1"=6.35 Meters

30 JULY 2020

YEATON ASSOCIATES, INC.
Bedford, NH | Lebanon, NH
MEP/FP Engineers
603.444.6578
5292

| | | | |
|------------------------------|---------------------------|------------|----------|
| FIELD BOOK: --- | DRAWING NAME: 5292CU SL21 | 5292 | 15 OF 16 |
| DRAWING LOG: C:\5292\CU\ DWG | | Per Number | Sheet |

DESCRIPTION
The Osborn™ LED luminaire delivers exceptional performance in a highly visible, low-profile design. Patented, high-efficiency AcuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, parking areas and security lighting applications. IP66 rated and ULX-UL listed for use outdoors.

SPECIFICATION FEATURES

Construction
Extruded aluminum driver enclosure thermally isolated from Light Source for optimal thermal performance. Heavy-duty, die-cast aluminum end caps enclose housing and die-cast aluminum heat sink. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural integrity. 303 stainless steel fasteners available for areas of entry into electrical chamber. Housing is IP66 rated.

Optics
Patented, high-efficiency AcuLED Optics™ technology. Optics are precisely designed to shape the distribution maximizing efficiency and application-specific. AcuLED Optics create consistent distribution with the scalability to meet customer application requirements. Offered standard in 4000K (4-2700 CCT to CRI), 5000K and 6000K (5000K CCT to CRI).

Electrical
LED drivers are exempted to minimize the amount of heat generated. 120-277V 60/50Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 50KV of transient line surge. The Osborn LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Source is IP66 rated. Greater than 90% lumen maintenance expected at 50,000 hours. Available in standard 1A, active current and optional 500mA, 600mA and 1000mA driver currents (nominal).

Mounting
STANDARD ARM MOUNT. Exposed aluminum arm includes internal ball joints allowing for easy positioning of fixture during mounting. When required, one or more luminaires at 90° and 180° span, the HA extended arm may be required. Refer to the arm mounting requirement table.

Finish
Housing finished in super durable TGIC polymer powder coat paint, 2.5 mil nominal thickness for superior protection against acids and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic.RAL and custom color matches available.

Warranty
Five-year warranty.

McGraw-Hill

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GLEON GALLEON LED

1-10 Light Source
Ball Mount LED

ANALYTE LUMINAIRE



ANALYTE LUMINAIRE

1-10 Light Source
Ball Mount LED

CERTIFICATION DATA

UL Listed
ULC Listed
CE Marked
RoHS Compliant
REACH Compliant
Energy Star Qualified
California Title 20 Compliant
California Title 24 Compliant
California Title 26 Compliant
California Title 27 Compliant
California Title 28 Compliant
California Title 29 Compliant
California Title 30 Compliant
California Title 31 Compliant
California Title 32 Compliant
California Title 33 Compliant
California Title 34 Compliant
California Title 35 Compliant
California Title 36 Compliant
California Title 37 Compliant
California Title 38 Compliant
California Title 39 Compliant
California Title 40 Compliant
California Title 41 Compliant
California Title 42 Compliant
California Title 43 Compliant
California Title 44 Compliant
California Title 45 Compliant
California Title 46 Compliant
California Title 47 Compliant
California Title 48 Compliant
California Title 49 Compliant
California Title 50 Compliant

ENERGY DATA

| Light Source | Power Factor | Total Harmonic Distortion | THD (%) | Power Factor | THD (%) |
|--------------|--------------|---------------------------|---------|--------------|---------|
| 1-10 | 0.95 | 10 | 10.0 | 0.95 | 10.0 |
| 1-10 | 0.95 | 10 | 10.0 | 0.95 | 10.0 |
| 1-10 | 0.95 | 10 | 10.0 | 0.95 | 10.0 |

January 11, 2019 10:58 PM

GLEON GALLEON LED

| Product Family | Light Source | Number of Light Sources | Lamp Type | Voltage | Mounting | Color | Mounting |
|----------------|--------------|-------------------------|------------|----------|------------|-------|----------|
| GLEON GALLEON | 1-10 LED | 1-10 | LED-Module | 120-277V | Ball Mount | Black | Standard |
| GLEON GALLEON | 1-10 LED | 1-10 | LED-Module | 120-277V | Ball Mount | Black | Standard |
| GLEON GALLEON | 1-10 LED | 1-10 | LED-Module | 120-277V | Ball Mount | Black | Standard |
| GLEON GALLEON | 1-10 LED | 1-10 | LED-Module | 120-277V | Ball Mount | Black | Standard |

ORDERING INFORMATION

| Ordering Options | Ordering Options | Ordering Options | Ordering Options |
|------------------|------------------|------------------|------------------|
| 1-10 LED | 1-10 LED | 1-10 LED | 1-10 LED |
| 1-10 LED | 1-10 LED | 1-10 LED | 1-10 LED |
| 1-10 LED | 1-10 LED | 1-10 LED | 1-10 LED |
| 1-10 LED | 1-10 LED | 1-10 LED | 1-10 LED |

CERTIFICATION DATA

UL Listed
ULC Listed
CE Marked
RoHS Compliant
REACH Compliant
Energy Star Qualified
California Title 20 Compliant
California Title 24 Compliant
California Title 26 Compliant
California Title 27 Compliant
California Title 28 Compliant
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California Title 48 Compliant
California Title 49 Compliant
California Title 50 Compliant

ENERGY DATA

| Light Source | Power Factor | Total Harmonic Distortion | THD (%) | Power Factor | THD (%) |
|--------------|--------------|---------------------------|---------|--------------|---------|
| 1-10 | 0.95 | 10 | 10.0 | 0.95 | 10.0 |
| 1-10 | 0.95 | 10 | 10.0 | 0.95 | 10.0 |
| 1-10 | 0.95 | 10 | 10.0 | 0.95 | 10.0 |

January 11, 2019 10:58 PM

Steel Poles



\$\$\$ SQUARE STRAIGHT STEEL

FEATURES
• ASTM Grade steel base plate with ASTM A36 base cover
• Hand built assembly 2" x 6" on 8" and 8" poles and 2" x 6" on 4" poles
• 10'-35' mounting heights
• Drilled or laser (specify)

ORDERING INFORMATION

| Ordering Options | Ordering Options | Ordering Options | Ordering Options |
|------------------|------------------|------------------|------------------|
| 10'-35' | 10'-35' | 10'-35' | 10'-35' |
| 10'-35' | 10'-35' | 10'-35' | 10'-35' |
| 10'-35' | 10'-35' | 10'-35' | 10'-35' |
| 10'-35' | 10'-35' | 10'-35' | 10'-35' |

CERTIFICATION DATA

UL Listed
ULC Listed
CE Marked
RoHS Compliant
REACH Compliant
Energy Star Qualified
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California Title 44 Compliant
California Title 45 Compliant
California Title 46 Compliant
California Title 47 Compliant
California Title 48 Compliant
California Title 49 Compliant
California Title 50 Compliant

ENERGY DATA

| Light Source | Power Factor | Total Harmonic Distortion | THD (%) | Power Factor | THD (%) |
|--------------|--------------|---------------------------|---------|--------------|---------|
| 10'-35' | 0.95 | 10 | 10.0 | 0.95 | 10.0 |
| 10'-35' | 0.95 | 10 | 10.0 | 0.95 | 10.0 |
| 10'-35' | 0.95 | 10 | 10.0 | 0.95 | 10.0 |

January 11, 2019 10:58 PM

Invue

The EPIC Collection delivers custom luminaire flexibility with high quality, yet available quantities of standard specification grade products. The EPIC Collection can be dimmed by both user application. Responding evolving environmental and legislative trends, the EPIC Collection delivers world class LED optical and performance solutions to the decorative luminaire marketplace.

SPECIFICATION FEATURES

Construction
TOP: Die cast aluminum top housing attached to cast aluminum mounting arm with four stainless steel fasteners. Die-cast aluminum gasket between mounting hub and top casting seals out moisture and contaminants. (See the mounting requirement section for a full selection of mounting arms. Only those arms compatible with the Epic luminaire. MISCELLANEOUS: Continuous aluminum gaskets seal from top casting and shade. The mild steel features cast aluminum construction and stainless steel assembly. SHADES: Heavy gauge polycarbonate upper enclosure provides superior surface finish and consistency in form. DECORATIVE: Die-cast aluminum 1/2" wide door and doorframe seal to underside of shade with a thick seal and stainless steel fasteners. Mounting hub options attached to mounting arm.

Optics
Optics of luminaire patent, high-efficiency AcuLED Optics™ technology manufactured from

Injection-molded acrylic. Optics are precisely designed to shape the optics, maximizing efficiency and application specific. AcuLED Optics™ technology creates consistent distribution with the scalability to meet customer application requirements. Offered standard in 4000K (4-2700 CCT and nominal 70 CRI), 5000K CCT and nominal 70 CRI. For the ultimate level of light output, an optional narrow-beam shield assembly can be field or factory installed. The narrow-beam shield is designed to maximize lumen output with the SL2, SL3 or SL4 optics.

Electrical
LED drivers mount to die-cast aluminum back housing for optimal heat sinking, superior efficiency, and protected life. Standard drivers feature electronic universal voltage 120-277V (60/50Hz), 347V 60Hz or 480V 60Hz operation. Greater than 90% lumen maintenance is available for operation in -40°C to 40°C ambient environments. All sources are shipped standard

Warranty
Five-year warranty.

ENERGY DATA

| Light Source | Power Factor | Total Harmonic Distortion | THD (%) | Power Factor | THD (%) |
|--------------|--------------|---------------------------|---------|--------------|---------|
| 1-4 | 0.95 | 10 | 10.0 | 0.95 | 10.0 |
| 1-4 | 0.95 | 10 | 10.0 | 0.95 | 10.0 |
| 1-4 | 0.95 | 10 | 10.0 | 0.95 | 10.0 |

January 11, 2019 10:58 PM

ECM/MEM EPIC MEDIUM LED

1-4 Light Source
Ball Mount LED

ANALYTE LUMINAIRE



ANALYTE LUMINAIRE

1-4 Light Source
Ball Mount LED

CERTIFICATION DATA

UL Listed
ULC Listed
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ENERGY DATA

| Light Source | Power Factor | Total Harmonic Distortion | THD (%) | Power Factor | THD (%) |
|--------------|--------------|---------------------------|---------|--------------|---------|
| 1-4 | 0.95 | 10 | 10.0 | 0.95 | 10.0 |
| 1-4 | 0.95 | 10 | 10.0 | 0.95 | 10.0 |
| 1-4 | 0.95 | 10 | 10.0 | 0.95 | 10.0 |

January 11, 2019 10:58 PM

Decorative Poles

| Product Family | Light Source | Number of Light Sources | Lamp Type | Voltage | Mounting | Color | Mounting |
|----------------|--------------|-------------------------|------------|----------|------------|-------|----------|
| STL SEATTLE | 1-10 LED | 1-10 | LED-Module | 120-277V | Ball Mount | Black | Standard |
| TAM TAMPA | 1-10 LED | 1-10 | LED-Module | 120-277V | Ball Mount | Black | Standard |
| UBN UTICA | 1-10 LED | 1-10 | LED-Module | 120-277V | Ball Mount | Black | Standard |
| WAS WASHINGTON | 1-10 LED | 1-10 | LED-Module | 120-277V | Ball Mount | Black | Standard |

ORDERING INFORMATION

| Ordering Options | Ordering Options | Ordering Options | Ordering Options |
|------------------|------------------|------------------|------------------|
| 10'-35' | 10'-35' | 10'-35' | 10'-35' |
| 10'-35' | 10'-35' | 10'-35' | 10'-35' |
| 10'-35' | 10'-35' | 10'-35' | 10'-35' |
| 10'-35' | 10'-35' | 10'-35' | 10'-35' |

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| Light Source | Power Factor | Total Harmonic Distortion | THD (%) | Power Factor | THD (%) |
|--------------|--------------|---------------------------|---------|--------------|---------|
| 10'-35' | 0.95 | 10 | 10.0 | 0.95 | 10.0 |
| 10'-35' | 0.95 | 10 | 10.0 | 0.95 | 10.0 |
| 10'-35' | 0.95 | 10 | 10.0 | 0.95 | 10.0 |

January 11, 2019 10:58 PM

Lighting Specifications (LOT 744, MAP "E")
PROPOSED CREDIT UNION BUILDING
NASHUA, NEW HAMPSHIRE

PREPARED FOR/RECORD OWNER
GRANITE STATE CREDIT UNION
1415 ELM STREET MANCHESTER, NEW HAMPSHIRE 03108

SCALE AS SHOWN
30 JULY 2020

YEATON ASSOCIATES, INC.
Bedford, NH 03110
MEP/FP Engineers
603.444.6578
E002

FIELD BOOK: DRAWING NAME: 52920J DET1 5292 16 OF 16
DRAWING LOG: 1/28/20/CHL D90 Pch Number



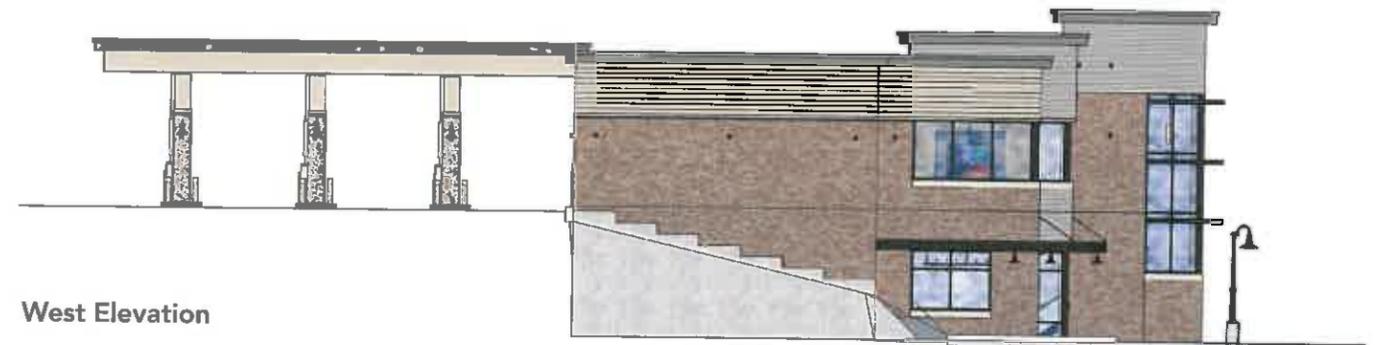
South Elevation



East Elevation



North Elevation



West Elevation



Right Perspective



Drive Thru Perspective



Left Perspective



190 Broad Street - 1,000 FT Vicinity Map



NASHUA CITY PLANNING BOARD
STAFF REPORT

TO: Nashua City Planning Board
FROM: Linda McGhee, Deputy Planning Manager
FOR: September 24, 2020
RE: **New Business #7- Site Plan**

I. Project Statistics:

Owner: Granite State Credit Union
Proposal: Amendment to NR2186 to show a proposed credit union
Location: 190 Broad Street
Total Site Area: 1.224 acres (53,333 sf)
Existing Zoning: GB-General Business
Surrounding Uses: Retail and medical

II. Background Information:

According to assessing records, this parcel has been home to medical offices since the 1960's. On November 16, 2014, the planning board approved a site plan to construct a 2-story 10,388 sf multi-tenant office. In 2015, 2016 and 2017 the board granted one year extensions; however that project never moved forward. Copies of the approval letters and staff reports are attached.

III. Project Description:

The proposal is to redevelop the existing two-story 6,400 sf building and construct a new two-story, 10,000 sf credit union building. Like the current site, there will be access from Coliseum Avenue to an upper driveway entry with four drive-through lanes and one bypass lane. The lower floor of the building will face the south and contain a parking lot, with access to Norwood Street. A one-way directional travel lane will connect the north drive-through lanes to the parking lot. A total of 37 parking spaces will service the proposed credit union. On-site drainage improvements include two subsurface stormwater recharge areas. Additionally, a number of other site improvements including curbing, sidewalks, landscaping and new site lighting are proposed.

A traffic memorandum dated July 9, 2020 from Stephen G. Pernaw, P.E., PTOE has been submitted for the proposed development. The Traffic Impact Report (TIR) Threshold Worksheet demonstrates a formal Traffic Impact Report is not required. A waiver request for architectural standards has been requested.

City Staff reviewed the plans; comments are attached.

Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet, the requirements outlined in the Site Plan NRO § 190-146(D). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, specific reasons should be given. If the Planning Board chooses to approve this plan, staff recommends the following stipulations be made part of that approval:

1. The request for a waiver of § 190-172(D) (3) and (4), which requires façade colors and predominant exterior building materials, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
2. Prior to the Chair signing the plan, minor drafting corrections will be made.
3. Prior to the Chair signing the plan, all comments in a letter Joe Mendola, Street Construction Engineer, dated _____ shall be addressed to the satisfaction of the Engineering Department.

**NASHUA CITY PLANNING BOARD
STAFF REPORT**

TO: Nashua City Planning Board
FROM: Linda McGhee, Deputy Planning Manager
FOR: September 24, 2020
RE: **New Business #8 - Site Plan**

I. Project Statistics:

Owner: Colinbrooke Homes, LLC
Proposal: Site plan to depict a proposed condominium development
Location: 133 Amherst Street
Total Site Area: 0.711 acres (30,971 sf)
Existing Zoning: RA-Urban Residence
Surrounding Uses: Residential

II. Background Information:

Currently, a single-family home with a pool and patio exist on the parcel. On May 12, 2020 the Zoning Board of Adjustment approved a variance to allow four principal structures on one lot, one existing and three additional single family homes proposed. The approval letter and minutes are attached.

III. Project Description:

The proposal is to construct three condominium style dwellings in addition to the existing single family home. The condos will be access by a drive along Jewell Lane where the existing drive is located. The new units will be serviced by municipal sewer, Pennichuck water, and underground utilities. A stormwater management report has been submitted and indicates that there will be no increase in runoff rates due to the development. There is no wetland impacts proposed as part of this plan.

Three waivers are being requested. The first is for design standards for private streets, 28' wide are required and the applicant is proposing 20'. The second is for lighting. This is a 4 unit condominium development and no formal lighting is proposed.

The final waiver is for sidewalks. While there is a significant need for sidewalks and pedestrian facilities throughout the City of Nashua, Jewell Lane is not on the sidewalk priority list. There is an existing sidewalk on Amherst Street. The site meets the criteria in § 190-212(D) and the owner would be eligible to make a contribution in lieu of sidewalk construction; the applicant's engineer is offering to make a contribution in the amount of \$5,400.00. Based on \$50 per linear foot along the entire frontage of Jewell Lane (200 linear feet) and subtracting a driveway width of 18 feet (for driveway width), the amount of the contribution should be \$9,100.00).

City staff reviewed the plans; comments are attached.

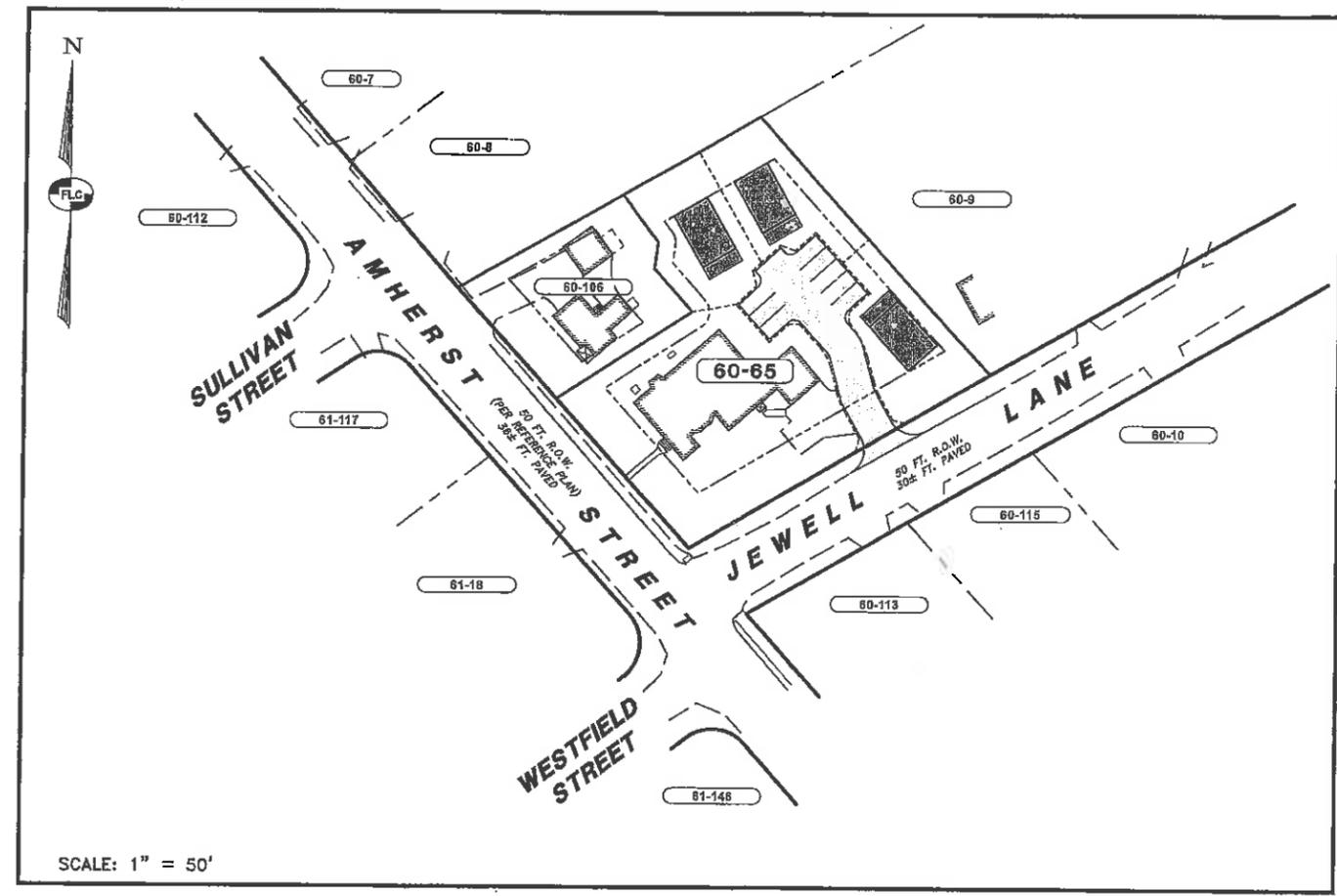
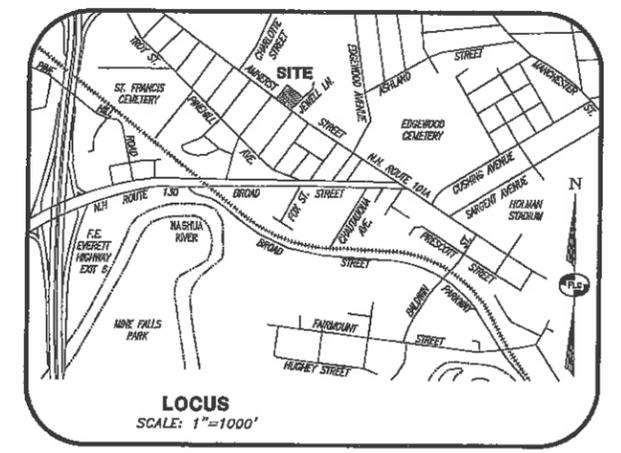
Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet, the requirements outlined in the Site Plan NRO § 190-146(D). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, specific reasons should be given. If the Planning Board chooses to approve this plan, staff recommends the following stipulations be made part of that approval:

1. The request for a waiver of NRO § 190-211(B), which establishes design standards for private streets width, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
2. The request for a waiver of NRO § 190-88, for a lighting plan, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
3. The request for a waiver of NRO § 190-212(A)(1), which requires that a sidewalk be located on at least one side of the street, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation. The applicant has agreed to make a contribution in the amount of \$_____ in lieu of sidewalk construction pursuant to §190-212(D)(2), payment to be made prior to recording the plan.
4. Prior to the Chair signing the plan, all comments in an e-mail from Tom Lacroix, Staff Engineer, and dated September 16, 2020 shall be addressed to the satisfaction of the Engineering Department.
5. Prior to the Chair signing the plan, minor drafting corrections will be made.
6. Prior to the Chair signing the plan, all conditions from the Planning Board approval letter will be added to the cover page of the final mylar and paper copies submitted to the City.
7. Prior to any work and a pre-construction meeting, a financial guarantee shall be approved.
8. Prior to the issuance of a building permit, the applicant shall provide documents establishing condominium association which will be responsible for maintaining all property in common ownership. The documents shall be submitted to the Planning Department and Corporation Counsel for review.
9. Prior to issuance of the final certificate of occupancy for the development, an as-built plan locating all driveways, units, other buildings, utilities and site landscaping shall be completed by a professional engineer and submitted to the Planning Department. The as-built plan shall include a statement that all construction was generally completed in accordance with the approved site plan and applicable local regulations.
10. Prior to the issuance of the last Certificate of Occupancy, all site improvements will be completed.

CONDOMINIUM SITE PLAN GYDIAN'S WAY

- LOT 65, MAP 60 -
133 AMHERST STREET
NASHUA, NEW HAMPSHIRE
JULY 30, 2020



| SHEET INDEX | | |
|-------------|-------|--------------------------------|
| PAGE | SHEET | TITLE |
| 1 | CV-1 | COVER SHEET |
| 2 | CD-1 | CONDOMINIUM SITE PLAN |
| 3 | EX-1 | EXISTING CONDITIONS PLAN |
| 4 | SP-1 | CONDOMINIUM SITE LAYOUT PLAN |
| 5 | GR-1 | GRADING & EROSION CONTROL PLAN |
| 6 | PP-1 | UTILITY PLAN AND PROFILE |
| 7 | DT-1 | CONSTRUCTION DETAILS |
| 8 | DT-2 | DRAINAGE DETAILS |
| 9 | DT-3 | EROSION CONTROL DETAILS |
| 10 | DT-4 | WATER DETAILS |
| 11 | DT-5 | SEWER DETAILS |

PREPARED FOR AND LAND OF:
COLINBROOKE HOMES, LLC
11 MCINTOSH LANE
BEDFORD, NEW HAMPSHIRE 03110

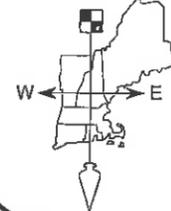


1. THE LOCATION OF THE UTILITIES SHOWN ARE APPROXIMATE. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PRESERVE ALL UTILITY SERVICES.
2. THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING AND COORDINATING WITH ALL UTILITY COMPANIES AND JURISDICTIONAL AGENCIES PRIOR TO AND DURING CONSTRUCTION.
3. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND PROPOSED WORK PRIOR TO CONSTRUCTION.

CONTACT DIG SAFE
72 HOURS PRIOR
TO CONSTRUCTION

DIGSAFE.COM
1-888-DIG SAFE
1-888-344-7233

Surveying ♦ Engineering ♦ Land Planning ♦ Permitting ♦ Septic Designs



FIELDSTONE

LAND CONSULTANTS, PLLC

206 Elm Street, Milford, NH 03055
Phone: (603)-672-5456 Fax: (603)-413-5456
www.FieldstoneLandConsultants.com



| REV. | DATE | DESCRIPTION | C/O | DR | CK |
|------|------|-------------|-----|----|----|
| | | | | | |
| | | | | | |

FILE: 2288CV01.dwg PROJ. NO. 2288.01 SHEET: CV-1 PAGE NO. 1 OF 11

LEGEND:

- EXISTING FEATURES**
- RIGHT-OF-WAY LINE
 - BOUNDARY LINE
 - G.B.(F)
 - L.P.P.F.(F)
 - L.P.W.(S)
 - D.H.(S)
 - 60-106
 - ADJUTING LOT LINE
 - BUILDING SETBACK LINE
 - EDGE OF PAVED ROAD
 - GRANITE CURB LINE
 - EXISTING BUILDING

- PROPOSED FEATURES**
- EDGE OF PAVEMENT
 - LIMITED COMMON AREA LINE
 - L.C.A. 2
 - PROPOSED BUILDING
 - ④
 - UNIT NUMBER

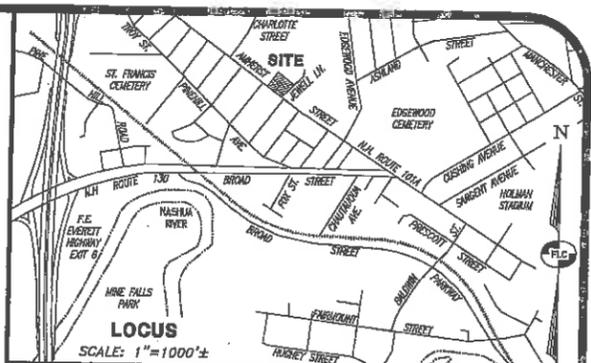
CERTIFICATION:

I HEREBY CERTIFY THAT THIS PLAN IS ACCURATE AND IN COMPLIANCE WITH THE PROVISIONS OF NH RSA 396-B:20, I, AND THAT ALL PROPOSED IMPROVEMENTS ARE NOT YET BEGUN.
 I ALSO CERTIFY THAT THIS SURVEY PLAT IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREET AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREET OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN (RSA 676:13, III AND 672:14).



CHRISTOPHER A. GUIDA
 No. 056
 CERTIFIED WETLAND SCIENTIST
 7/30/20

OWNERS SIGNATURE: *[Signature]* DATE: 7/30/2020
APPROVED BY NASHUA PLANNING BOARD
 CHAIRMAN: _____ DATE: _____
 SECRETARY: _____ DATE: _____



NOTES:

- THE APPLICANT AND OWNER OF RECORD FOR TAX MAP 60 LOT 65 IS COLINBROOKE HOMES, LLC, 11 MCINTOSH LANE, BEDFORD, NH 03110. THE DEED REFERENCES FOR THE PARCELS ARE VOL.5223 PG.1844 DATED OCTOBER 22, 2019 IN THE H.C.R.D.
- THE PURPOSE OF THIS PLAN IS TO DEPICT THE PROPOSED DETACHED CONDOMINIUM DEVELOPMENT ALONG WITH ASSOCIATED SITE IMPROVEMENTS.
- THE TOTAL EXISTING AREA OF LOT 65 IS 0.711 ACRES OR 30,871 SQ.FT.
- LOT NUMBERS REFER TO THE CITY OF NASHUA ASSESSORS MAP 60.
- ZONING FOR THE PARCEL IS DISTRICT (R-A).

| R-A ZONE | CONVENTIONAL | REQUIRED | 60-65 |
|-------------------------|--------------|-----------|-------|
| MIN LOT AREA | 7,500 SF | 30,971 SF | 5F |
| MIN LOT WIDTH | 75 FT | 199.80 FT | |
| MIN LOT FRONTAGE | 60 FT | 315.00 FT | |
| MIN LOT DEPTH | 90 FT | 199.64 FT | |
| MIN FRONT SETBACK | 25 FT | 31.05 FT | |
| MIN SIDE SETBACK | 10 FT | 8.58 FT | |
| MIN REAR SETBACK | 25 FT | 47.80 FT | |
| MAX. BUILDING HEIGHT | 35 FT | 32.4 FT | |
| MAX. STORIES | 2.5 ST | 2.0 ST | |
| OPEN SPACE FOR EACH LOT | 50% | 65% | |
- THE SURFACE FEATURES AND BOUNDARY INFORMATION SHOWN WERE DEVELOPED FROM THE REFERENCE PLANS CITED AND A PRECISE FIELD SURVEY BY THIS OFFICE DURING THE MONTH OF AUGUST, 2018. HORIZONTAL ORIENTATION IS BASED ON REFERENCE PLAN #1. VERTICAL DATUM IS ASSUMED.
- JURISDICTIONAL WETLANDS WERE NOT LOCATED IN A FLOOD HAZARD AREA AS DETERMINED FROM THE FLOOD INSURANCE STUDY (FRM), HILLSBOROUGH COUNTY, CITY OF NASHUA, NEW HAMPSHIRE, COMMUNITY NO. 330087, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, MAP NUMBER 3301105130, DATED: SEPTEMBER 25, 2008.
- THE SITE IS NOT LOCATED WITHIN THE WATER SUPPLY PROTECTION DISTRICT.
- THE SITE IS CURRENTLY SERVICED BY OVERHEAD UTILITIES AND BY MUNICIPAL SEWER AND WATER BY PENNICHUCK WATER WORKS.
- THE SUBJECT PARCEL IS NOT LOCATED IN A FLOOD HAZARD AREA AS DETERMINED FROM THE FLOOD INSURANCE STUDY (FRM), HILLSBOROUGH COUNTY, CITY OF NASHUA, NEW HAMPSHIRE, COMMUNITY NO. 330087, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, MAP NUMBER 3301105130, DATED: SEPTEMBER 25, 2008.
- SOIL TYPE FOR THE ENTIRE SITE IS H88 (HINCKLEY LOAMY SAND WITH SLOPES FROM 0X-3X).
- TO THE BEST OF MY KNOWLEDGE AND BELIEF, THERE ARE NO KNOWN EASEMENTS OR ENCUMBRANCES ON THE SUBJECT PARCEL.
- THE PROPOSED MONUMENTS WERE SET ON 11/01/2019 AS SHOWN HEREON.



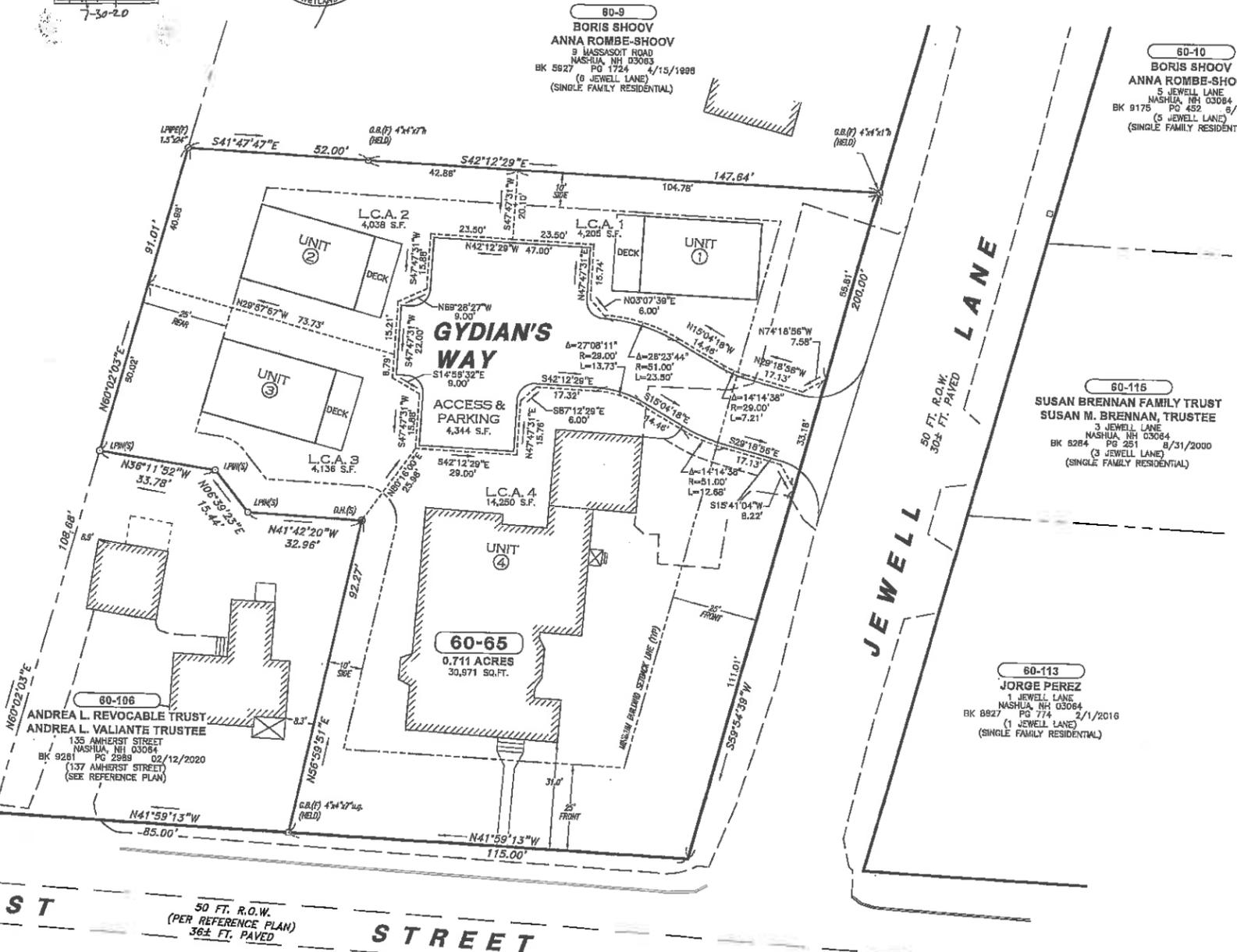
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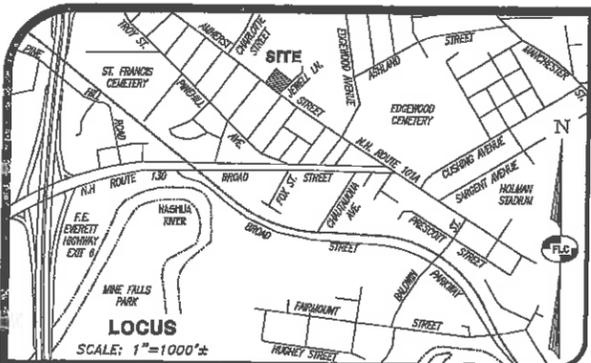
CONDOMINIUM SITE PLAN
TAX MAP 60 LOT 65
(133 AMHERST STREET)
 NASHUA, NEW HAMPSHIRE
 PREPARED FOR & LAND OF:
COLINBROOKE HOMES, LLC
 11 MCINTOSH LANE BEDFORD, NH 03110

SCALE: 1" = 20' JULY 14, 2020

Surveying ♦ Engineering ♦ Land Planning ♦ Permitting ♦ Septic Designs

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 206 Elm Street, Milford, NH 03055
 Phone: (603) 672-9456 Fax: (603) 418-5456
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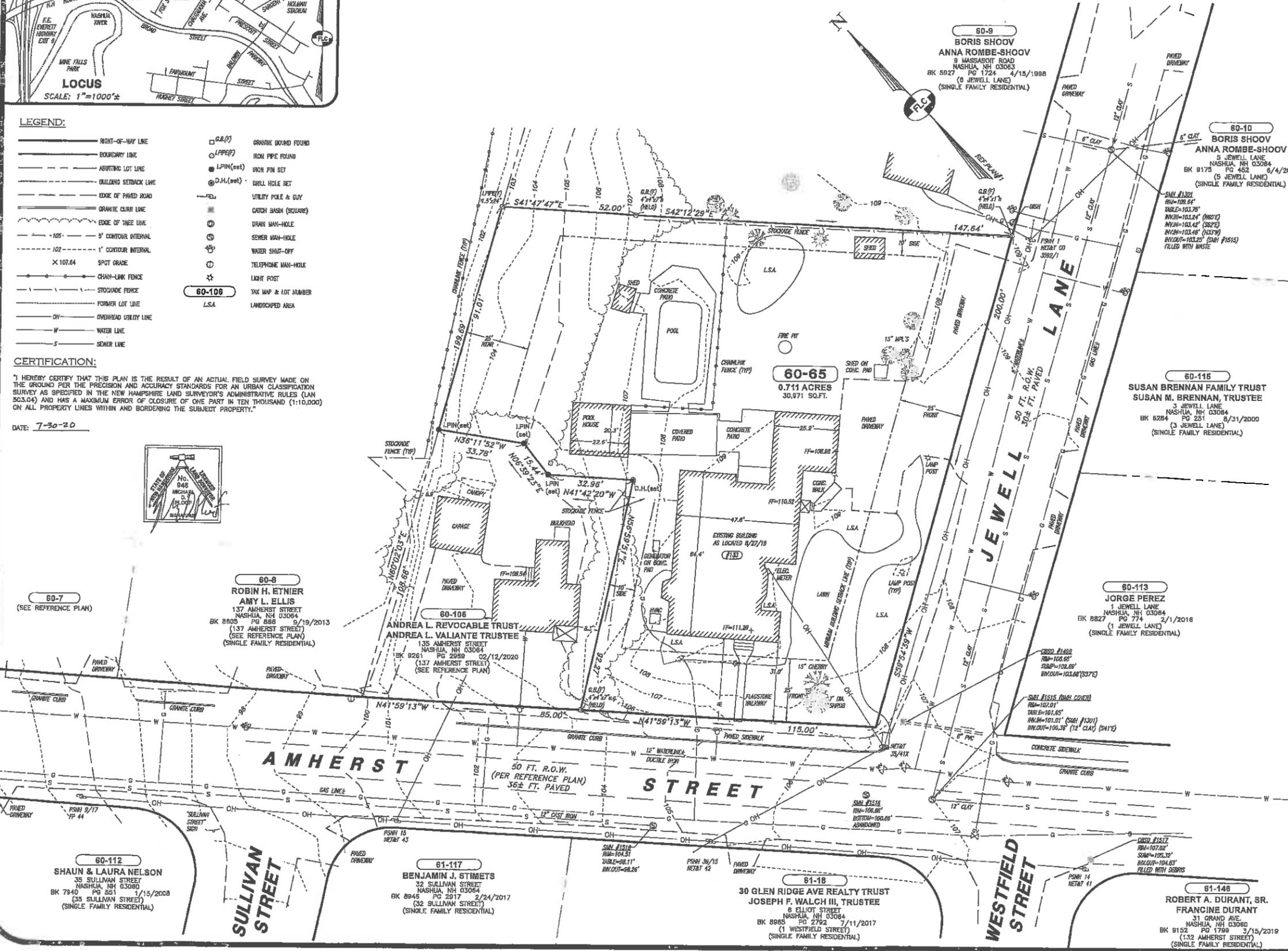
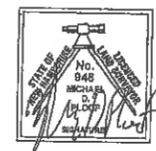
REFERENCE PLANS:

- *CORRECTIVE - CONSOLIDATION AND -- LOT LINE RELOCATION PLAN (LOTS 7, 8, & 26 SHEET 60) - 137 & 135 1/2 AMHERST ST. - NASHUA, NEW HAMPSHIRE, SCALE: 1"=20', DATED MAY 8, 1987 AND REVISED THROUGH JUNE 7, 1989 BY ALLAN H. SWANSON, INC. AND RECORDED AS PLAN #23473 IN THE H.C.R.D.
- *LOT LINE RELOCATION PLAN - TAX MAP 60 LOTS 65 & 106 - 133 & 135 AMHERST STREET - NASHUA, NEW HAMPSHIRE - PREPARED FOR 7 LAND OFI - WORTLAND LEGACY LAND TRUST, LLC, SCALE: 1"=20', DATED SEPTEMBER 5, 2019 BY FIELDSTONE LAND CONSULTANTS, PLLC AND RECORDED AS PLAN #40408 IN THE H.C.R.D.

- LEGEND:**
- RIGHT-OF-WAY LINE
 - BOUNDARY LINE
 - ADJUTING LOT LINE
 - BUILDING SETBACK LINE
 - EDGE OF PAVED ROAD
 - GRANITE CURB LINE
 - EDGE OF TREE LINE
 - 105' 3" CONTOUR INTERVAL
 - 102' 6" CONTOUR INTERVAL
 - 102.64' SPOT GRADE
 - CHAIN-LINK FENCE
 - STOCKADE FENCE
 - FORMER LOT LINE
 - OVERHEAD UTILITY LINE
 - WATER LINE
 - SEWER LINE
 - G.B.(f) GRANITE BOUND FOUND
 - L.P.P.E.(f) IRON PIPE FOUND
 - L.PIN(set) IRON PIN SET
 - D.H.(set) DRILL HOLE SET
 - UTILITY POLE & GUY
 - CATCH BASIN (SQUARE)
 - DRAIN MAN-HOLE
 - SEWER MAN-HOLE
 - WATER SHUT-OFF
 - TELEPHONE MAN-HOLE
 - LIGHT POST
 - TAX MAP & LOT NUMBER
 - LSA LANDSCAPED AREA

CERTIFICATION:
I HEREBY CERTIFY THAT THIS PLAN IS THE RESULT OF AN ACTUAL FIELD SURVEY MADE ON THE GROUND FOR THE PRECISION AND ACCURACY STANDARDS FOR AN URBAN CLASSIFICATION SURVEY AS SPECIFIED IN THE NEW HAMPSHIRE LAND SURVEYOR'S ADMINISTRATIVE RULES (LAN 203.04) AND HAS A MAXIMUM ERROR OF CLOSURE OF ONE PART IN TEN THOUSAND (1:10,000) ON ALL PROPERTY LINES WITHIN AND BORDERING THE SUBJECT PROPERTY.

DATE: 7-30-20



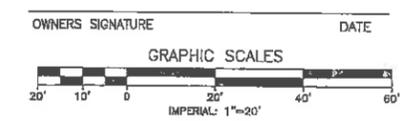
NOTES:

- THE APPLICANT AND OWNER OF RECORD FOR TAX MAP 60 LOTS 65 IS COLINBROKE HOMES - 11 MCINTOSH LAND, BEDFORD, NH 03110. THE DEED REFERENCES FOR THE PARCEL IS VOL.9223 PG.1844 DATED MAY 25, 2017 (LOT 60-65) AND VOL.9012 PG.1533 DATED OCTOBER 22, 2019 IN THE H.C.R.D.
- THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS AND TOPOGRAPHY FOR TAX MAP 60 LOT 65.
- THE TOTAL EXISTING AREA OF TAX MAP LOT 60-65 IS 0.711 ACRES OR 30,971 SQ.FT.
- LOT NUMBERS REFER TO THE CITY OF NASHUA ASSESSORS MAP 60.
- ZONING FOR THE PARCEL IS DISTRICT (R-4). LOT REQUIREMENTS ARE:
MIN LOT AREA 7,500 SF
MIN LOT WIDTH 75 FT
MIN LOT FRONTAGE 60 FT
MIN LOT DEPTH 90 FT
MIN FRONT SETBACK 10 FT
MIN SIDE SETBACK 25 FT
MIN REAR SETBACK 25 FT
MAX. BUILDING HEIGHT 35 FT
MAX. STORIES 2.5 ST
OPEN SPACE 50%
- THE SURFACE FEATURES AND BOUNDARY INFORMATION SHOWN WERE DEVELOPED FROM THE REFERENCE PLANS CITED AND A PRECISE FIELD SURVEY BY THIS OFFICE DURING THE MONTH OF AUGUST, 2019. HORIZONTAL ORIENTATION IS BASED ON REFERENCE PLAN #1. VERTICAL DATUM IS NASHUA CITY DATUM.
- JURISDICTIONAL WETLANDS WERE NOT FOUND ON THE SUBJECT PARCEL PER AN ON SITE FIELD INVESTIGATION BY CHRISTOPHER A. GUIDA, C.W.S. IN AUGUST, 2018 IN ACCORDANCE WITH THE "CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, TECHNICAL REPORT Y-87-1, DATED JANUARY 1987".
- THE SITE IS NOT LOCATED WITHIN THE WATER SUPPLY PROTECTION DISTRICT.
- THE SITE IS CURRENTLY SERVICED BY OVERHEAD UTILITIES AND BY MUNICIPAL SEWER AND WATER BY PENNICHUCK WATER WORKS.
- THE SUBJECT PARCEL IS NOT LOCATED IN A FLOOD HAZARD AREA AS DETERMINED FROM THE FLOOD INSURANCE STUDY (FIRM), HILLSBOROUGH COUNTY, CITY OF NASHUA, NEW HAMPSHIRE, COMMUNITY NO. 330097, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, MAP NUMBER: 33011C05130, DATED: SEPTEMBER 25, 2008.
- SOIL TYPE FOR THE ENTIRE SITE IS Hsb (HICKLEY LOAMY SAND WITH SLOPES FROM 0%-3%).
- TO THE BEST OF MY KNOWLEDGE AND BELIEF, THERE ARE NO KNOWN EASEMENTS OR ENCUMBRANCES ON THE SUBJECT PARCEL.



APPROVED BY NASHUA PLANNING BOARD

CHAIRMAN: _____ DATE: _____
SECRETARY: _____ DATE: _____



| REV. | DATE | DESCRIPTION | C/O | DR | CK |
|------|------|-------------|-----|----|----|
| | | | | | |

EXISTING CONDITIONS PLAN
TAX MAP 60 LOTS 65 & 106
(133 & 135 AMHERST STREET)
NASHUA, NEW HAMPSHIRE
PREPARED FOR & LAND OF:
COLINBROKE HOMES
11 MCINTOSH LAND, BEDFORD, NH 03110

SCALE: 1" = 20' SEPTEMBER 5, 2019

Surveying ♦ Engineering ♦ Land Planning ♦ Permitting ♦ Septic Designs

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206 Elm Street, Milford, NH 03055
Phone: (603) 672-5456 Fax: (603) 413-5456
www.FieldstoneLandConsultants.com

LEGEND:

EXISTING FEATURES

- RIGHT-OF-WAY LINE
- BOUNDARY LINE
- ABUTTING LOT LINE
- BUILDING SETBACK LINE
- EDGE OF PAVED ROAD
- GRANITE CURB LINE
- EDGE OF TREE LINE
- 10' CONTOUR INTERVAL
- 500' — 2' CONTOUR INTERVAL
- CHAIN-LINK FENCE
- STOCKADE FENCE
- FORMER LOT LINE
- OVERHEAD UTILITY LINE
- WATER LINE
- SEWER LINE

- G.R.(?) GRANITE BOUND FOUND
- L.P.F.(?) IRON PIPE FOUND
- L.P.W.(S) IRON PIN SET
- ⊙ D.H.(S) DRILL HOLE SET
- UTILITY POLE & GUY
- CATCH BASIN (SQUARE)
- DRAIN MAN-HOLE
- ⊙ SEWER MAN-HOLE
- ⊙ WATER SHUT-OFF
- ⊙ TELEPHONE MAN-HOLE
- ★ LIGHT POST

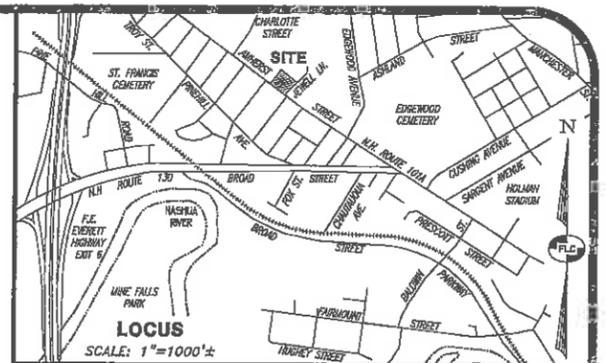
- ABBREVIATIONS:**
- L.C.A. LIMITED COMMON AREA
 - (TBR) TO BE REMOVED
 - G.S. GARAGE SLAB
 - K.W. KNEE WALL
 - W.C. WALK OUT BASEMENT
 - V.C.P. VITRIFIED CLAY PIPE

PROPOSED FEATURES

- ▭ PAVED AREA
- EDGE OF PAVEMENT
- LIMITED COMMON AREA LINE
- ④ L.C.A. 2 LIMITED COMMON AREA NUMBER
- ▨ PROPOSED BUILDING
- ④ UNIT NUMBER
- LIMIT OF CLEARING
- ▨ EXISTING PAVEMENT TO BE REMOVED, LOAMED, SEEDED AND/OR LANDSCAPED.

NOTES CONTINUED:

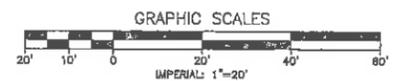
16. PRIOR TO A BUILDING PERMIT BEING ISSUED, DOCUMENTS PERTAINING TO THE STORM WATER OPERATION AND MAINTENANCE AND ANY EASEMENTS SHALL BE RECORDED.
17. THE PROPOSED BUILDINGS SHALL BE SERVICED BY UNDERGROUND TELEPHONE, ELECTRIC, CABLE AND NATURAL GAS UTILITIES. IT SHALL ALSO BE SERVICED BY MUNICIPAL SEWER AND WATER BY PENNICHUCK WATER WORKS.
18. STREET AND UTILITY IMPROVEMENTS SHALL COMPLY WITH ALL APPLICABLE SECTIONS OF THE CITY OF NASHUA REVISED ORDINANCES (N.R.O.).
19. PUBLIC STREET RESTORATION WORK, IF ANY, SHALL BE IN ACCORDANCE WITH N.R.O. SECTION 285-13.
20. THIS DEVELOPMENT WILL BE SERVICED BY A PRIVATE ROAD AND THERE SHALL BE NO ON-STREET PARKING PERMITTED. SIGNAGE WILL BE INSTALLED STATING NO ON-STREET PARKING.
21. THE HOMEOWNER'S ASSOCIATION SHALL BE RESPONSIBLE FOR THE MAINTENANCE OF DRAINAGE AND THE ROAD.
22. THE UNITS DEPICTED ON THIS PLAN ARE INTENDED TO SHOW A POTENTIAL LAYOUT MEETING LOCAL REGULATIONS. FINAL HOUSE PLACEMENT AND DIMENSIONS ARE SUBJECT TO INDIVIDUAL PERMITS.
23. THE ZONING BOARD OF ADJUSTMENT APPROVED A VARIANCE ON MAY 12, 2020 TO PERMIT MORE THAN ONE PRINCIPAL STRUCTURE ON THE LOT.



NOTES:

1. THE APPLICANT AND OWNER OF RECORD FOR TAX MAP 60 LOT 65 IS COLINBROOKE HOMES, LLC, 11 MCINTOSH LANE, BEDFORD, NH 03110. THE DEED REFERENCES FOR THE PARCELS ARE VOL.9223 PG.1844 DATED OCTOBER 22, 2019 IN THE H.C.R.D.
2. THE PURPOSE OF THIS PLAN IS TO DEPICT THE PROPOSED DETACHED CONDOMINIUM DEVELOPMENT ALONG WITH ASSOCIATED SITE IMPROVEMENTS.
3. THE TOTAL EXISTING AREA OF LOT 60-65 IS 0.711 ACRES OR 30,871 SQ.FT.
4. LOT NUMBERS REFER TO THE CITY OF NASHUA ASSESSORS MAP 60.
5. ZONING FOR THE PARCEL IS DISTRICT (R-A).

| R-A ZONE, CONVENTIONAL | REQUIRED | 60-65 |
|-------------------------|----------|-----------|
| MIN LOT AREA | 7,500 SF | 30,871 SF |
| MIN LOT WIDTH | 75 FT | 109.00 FT |
| MIN LOT FRONTAGE | 60 FT | 315.00 FT |
| MIN LOT DEPTH | 90 FT | 198.84 FT |
| MIN FRONT SETBACK | 25 FT | 31.05 FT |
| MIN SIDE SETBACK | 10 FT | 6.98 FT |
| MIN REAR SETBACK | 25 FT | 47.80 FT |
| MAX. BUILDING HEIGHT | 35 FT | 30± FT |
| MAX. STORES | 2.5 ST | 2.0 ST |
| OPEN SPACE FOR EACH LOT | 50% | 68% |
6. THE SURFACE FEATURES AND BOUNDARY INFORMATION SHOWN WERE DEVELOPED FROM THE REFERENCE PLANS CITED AND A PRECISE FIELD SURVEY BY THIS OFFICE DURING THE MONTH OF AUGUST, 2019. HORIZONTAL ORIENTATION IS BASED ON REFERENCE PLAN #1. VERTICAL DATUM IS ASSUMED.
7. JURISDICTIONAL WETLANDS WERE NOT FOUND ON THE SUBJECT PARCEL PER AN ON SITE FIELD INVESTIGATION BY CHRISTOPHER A. GUIDA, C.W.S. IN AUGUST, 2019 IN ACCORDANCE WITH THE "CORPS OF ENGINEERS WETLAND DELINEATION MANUAL, TECHNICAL REPORT Y-87-1, DATED JANUARY 1987".
8. THE SITE IS NOT LOCATED WITHIN THE WATER SUPPLY PROTECTION DISTRICT.
9. THE SITE IS CURRENTLY SERVICED BY OVERHEAD UTILITIES AND BY MUNICIPAL SEWER AND WATER BY PENNICHUCK WATER WORKS.
10. THE SUBJECT PARCEL IS NOT LOCATED IN A FLOOD HAZARD AREA AS DETERMINED FROM THE FLOOD INSURANCE STUDY (FIRM), HILLSBOROUGH COUNTY, CITY OF NASHUA, NEW HAMPSHIRE, COMMUNITY NO. 330087, PREPARED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY, MAP NUMBER: 330110513D, DATED: SEPTEMBER 25, 2008.
11. SOIL TYPE FOR THE ENTIRE SITE IS H&B (MACKLEY LOAMY SAND WITH SLOPES FROM 0% - 3%).
12. TO THE BEST OF MY KNOWLEDGE AND BELIEF, THERE ARE NO KNOWN EASEMENTS OR ENCUMBRANCES ON THE SUBJECT PARCEL.
13. THE PROPOSED MONUMENTS WERE SET ON 11/01/2019 AS SHOWN HEREON.
14. THE SITE IMPROVEMENTS DEPICTED ON THE PLAN SHALL CONFORM WITH TITLE III OF AMERICANS WITH DISABILITIES ACT WITH REGARD TO DIMENSION, GRADE AND PARKING.
15. EXCEPT BUILDING CONSTRUCTION SHALL INCORPORATE A FOUNDATION DRAINAGE SYSTEM, PROVED WHERE AN INVESTIGATION ESTABLISHES THAT THE SPECIFIC BUILDING SITE IS LOCATED IN WELL DRAINED SOILS AND THAT SUCH A SYSTEM IS NOT REQUIRED.



| REV. | DATE | DESCRIPTION | C/O | DR | CK |
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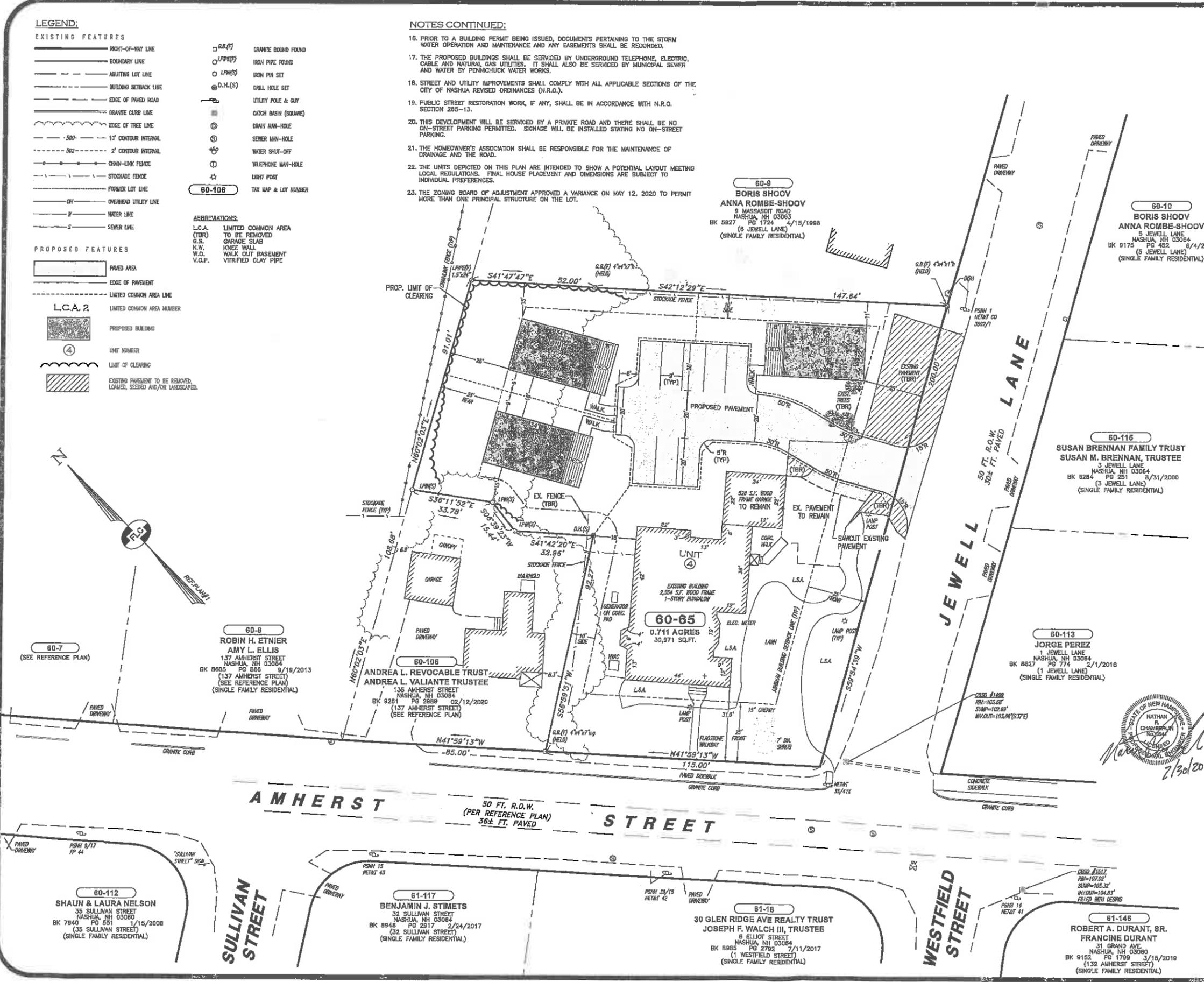
CONDOMINIUM SITE LAYOUT PLAN
TAX MAP 60 LOT 65
(133 AMHERST STREET)
NASHUA, NEW HAMPSHIRE
 PREPARED FOR & LAND OF:
COLINBROOKE HOMES, LLC
 11 MCINTOSH LANE BEDFORD, NH 03110

SCALE: 1" = 20' JULY 14, 2020

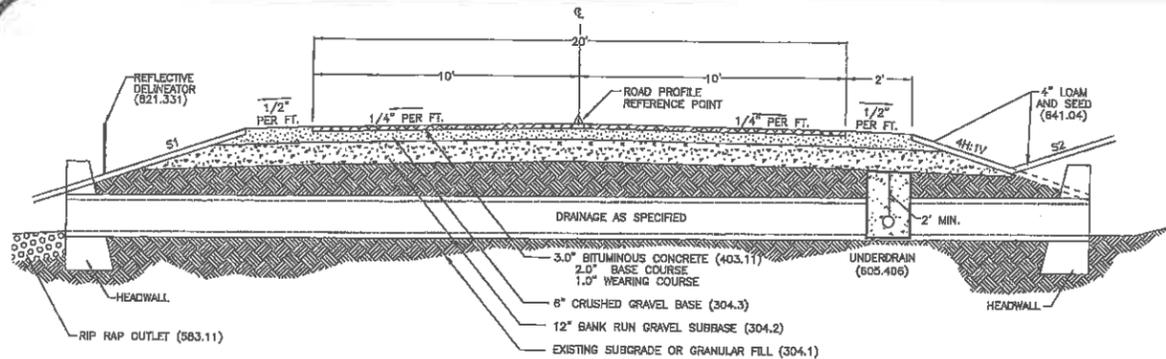
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STATE OF NEW HAMPSHIRE
 NATHAN R. CHAMBERLAIN
 REGISTERED PROFESSIONAL SURVEYOR
 7/30/20



GENERAL ROAD CONSTRUCTION NOTES

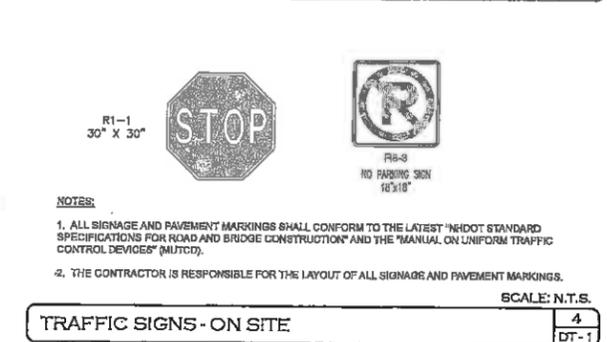
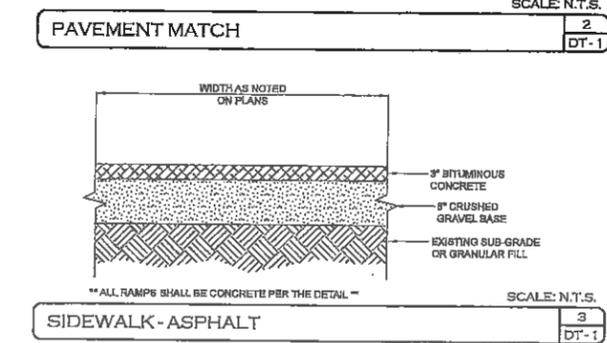
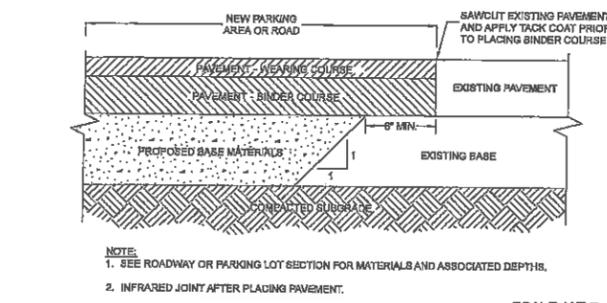
- REMOVE ALL LOAM, CLAY, MUCK, STUMPS, AND OTHER IMPROPER ROAD FOUNDATION MATERIAL WITHIN 3' OF SUBGRADE. REPLACE WITH COMPACTED GRANULAR FILL MATERIAL ACCEPTABLE TO THE ENGINEER. COMPACTION TO BE AT LEAST 95% OF THE DRY WEIGHT AS DETERMINED BY MODIFIED PROCTOR TESTING (ASTM 1557).
- ALL MATERIALS AND CONSTRUCTION SHALL MEET AND BE COMPLETED IN STRICT ACCORDANCE WITH THE CITY OF NASHUA CURRENT ROAD AND DRAINAGE SPECIFICATIONS.
- BASED ON SOIL TESTING, UNDERDRAINS SHOULD NOT BE NECESSARY ON PROPOSED ROADWAYS

SCALE: N.T.S.

| DISTANCE TO ORIGINAL GROUND | S1 (FILL) | S2 (CUT) |
|-----------------------------|-----------|----------|
| LESS THAN 10' | 4:1 | 3:1 |
| 10' TO 20' | 3:1 | 2:1 |
| GREATER THAN 20' LEDGE | 2:1 | 2:1 |

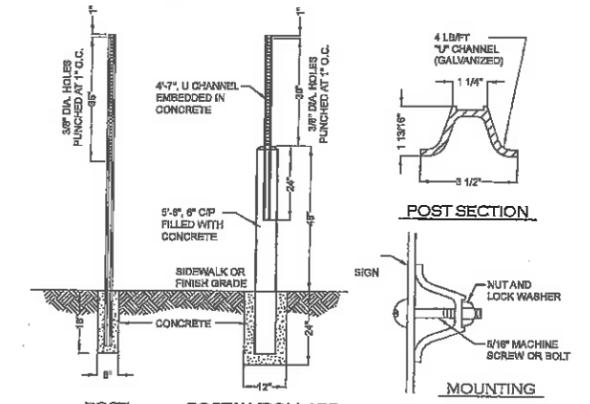
TYPICAL CROSS-SECTION - COMMON DRIVE

| | |
|---|------|
| 1 | DT-1 |
|---|------|



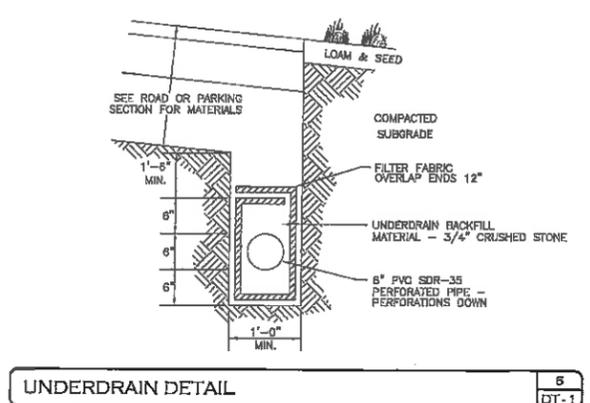
TRAFFIC SIGNS - ON SITE

| | |
|---|------|
| 4 | DT-1 |
|---|------|



SIGN POST - STANDARD & W/BOLLARD

| | |
|---|------|
| 5 | DT-1 |
|---|------|



UNDERDRAIN DETAIL

| | |
|---|------|
| 6 | DT-1 |
|---|------|

NOTE:
1. MINIMUM PIPE SIZE FOR HOUSE SERVICE SHALL BE 4 INCHES.
2. PIPE AND JOINT MATERIALS

A. PLASTIC SEWER PIPE

1. PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

| ASTM STANDARD | GENERIC PIPE MATERIAL | APPROVED SIZES |
|---------------|-------------------------|-----------------------------|
| D2324 | PVC (SOLID WALL) | 8" THROUGH 15" (SDR 35) |
| F797 | PVC (SOLID WALL) | 18" THROUGH 30" (F-1 & F-2) |
| F798 | PVC (ROBBERED WALL) | 4" THROUGH 18" (F-1 TO F-3) |
| F794 | PVC (ROBBERED WALL) | 4" THROUGH 36" |
| D2683 | ABS (COMPOSITE WALL) | 4" THROUGH 18" |
| | PVC FOLY VINYL CHLORIDE | 4" THROUGH 18" |

**ASS: ACRYLONITRILE-BUTADIENE-STYRENE

2. JOINTS SHALL FOR PVC PIPE SHALL BE OIL RESISTANT COMPRESSION RINGS OF ELASTOMERIC MATERIAL CONFORMING TO ASTM D-3212 AND SHALL BE PUSH-ON, BELL AND SPIGOT TYPE. ABS TRUSS PIPE AND FITTINGS SHALL CONFORM TO ASTM D-6994, POLYMER COMPOUNDING SHALL BE TO ASTM D-1788 (CLASS 322). JOINTS FOR ABS TRUSS PIPE SHALL BE CHEMICAL WELDED COUPLINGS TYPE SO IN ACCORDANCE WITH ASTM D-2886, FORMING A CHEMICAL WELDED JOINT.

B. DUCTILE-IRON PIPE, FITTINGS AND JOINTS

1. DUCTILE IRON PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING STANDARDS OF THE UNITED STATES OF AMERICA STANDARDS INSTITUTIONS:

ASTM A151 DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS FOR WATER OR OTHER LIQUIDS.
ASTM A889 THICKNESS DESIGN OF DUCTILE IRON PIPE AND WITH ASTM A-888 DUCTILE IRON CASTINGS.
ASTM A153 RIBBLE IRON PIPE, CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS FOR WATER OR OTHER LIQUIDS.

2. JOINTS SHALL BE OF THE MECHANICAL OR PUSH-ON TYPE. JOINTS AND GASKETS SHALL CONFORM TO:

ASTM A118 RUBBER GASKETS JOINTS FOR CAST IRON PRESSURE PIPE AND FITTINGS.

3. DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE.

4. JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMER GASKET FOR WATER TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER OR AT THE FOUNDATION WALL, APPROPRIATE ADAPTERS SHALL BE USED.

5. "T AND Y" WHEREAS "Y" IS NOT AVAILABLE IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE IN THE SEWER, FOLLOWING MANUFACTURER'S INSTRUCTIONS USING A BOLTED, CLAMPED, OR EPDM GEMENTED SADDLE TAPPED INTO A SMOOTHLY DRILLED OR BORED OPENING. THE PRACTICE OF BREAKING AN OPENING WITH A SLEDGE HAMMER, STUFFING CLOTH (OR OTHER SUCH MATERIAL) AROUND THE JOINT OR APPLYING MORTAR TO HOLD THE CONNECTION AND ANY OTHER SIMILAR CRUDE PRACTICES OR WELT ON BARTY IMPROVEMENTS WILL NOT BE PERMITTED. THE CONNECTION SHALL BE CONCRETE ENCASED, AS SHOWN IN THE DETAIL UP TO AND INCLUDING 18" DIAMETER.

6. HOUSE SEWER INSTALLATION THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE AND/OR GRAVEL AS SPECIFIED IN NOTE 10. BEDDING AND RE-FILL FOR A DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH APPROPRIATE MECHANICAL DEVICES. THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE HOUSE FOUNDATION AT A GRADE OF NOT LESS THAN 1/4 INCH PER FOOT. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DRY THE TRENCH.

7. TESTING THE COMPLETED HOUSE SEWER SHALL BE SUBJECT TO A LEAKAGE TEST IN ANY OF THE FOLLOWING MANNERS PRIOR TO BACKFILL:

A. AN OBSERVATION "Y" SHALL BE INSTALLED AS SHOWN. WHEN READY TESTING, AN INFLATABLE BAGGER OR PLUG SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE "Y". AFTER INFLATION, WATER SHALL BE INTRODUCED INTO THE SYSTEM ABOVE THE PLUG TO A HEIGHT OF 6 FEET ABOVE THE LEVEL OF THE PLUG.
B. THE PIPE SHALL BE LEFT EXPOSED AND LIBERALLY HOSED WITH WATER TO SIMULATE, AS NEARLY AS POSSIBLE, WET TRENCH CONDITIONS. IF THE TRENCH IS WET, THE GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. INSPECTIONS FOR LEAKS SHALL BE MADE THROUGH THE CLEANOUT WITH A FLASHLIGHT.
C. DRY FLUORESCENT DYE SHALL BE SPRINKLED INTO THE TRENCH OVER THE PIPE. IF THE TRENCH IS DRY, THE PIPE SHALL BE LIBERALLY HOSED WITH WATER. IF THE TRENCH IS WET, GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. OBSERVATION FOR LEAKS SHALL BE MADE IN THE FIRST MARKED DOWNSTREAM. LEAKAGE OBSERVED IN ANY OF THE ABOVE ALTERNATE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG UP, IF NECESSARY, AND RE-LAID SO AS TO ASSURE WATER TIGHTNESS.
8. ILLEGAL CONNECTIONS NOTING SUB STANTIAL WASTE FLOW FROM THE HOUSE TOILETS, SINKS, LAUNDRY, ETC. SHALL BE PERMITTED. ROOF LEADINGS, FOOTING DRAINS, BUMP PUMPS OR ANY OTHER SIMILAR CONNECTION CARRYING RAIN WATER, DRAINAGE OR GROUND WATER SHALL NOT BE PERMITTED.

9. HOUSE WATER SERVICE SHALL NOT BE LAID IN THE SAME TRENCH AS THE SEWER SERVICE.

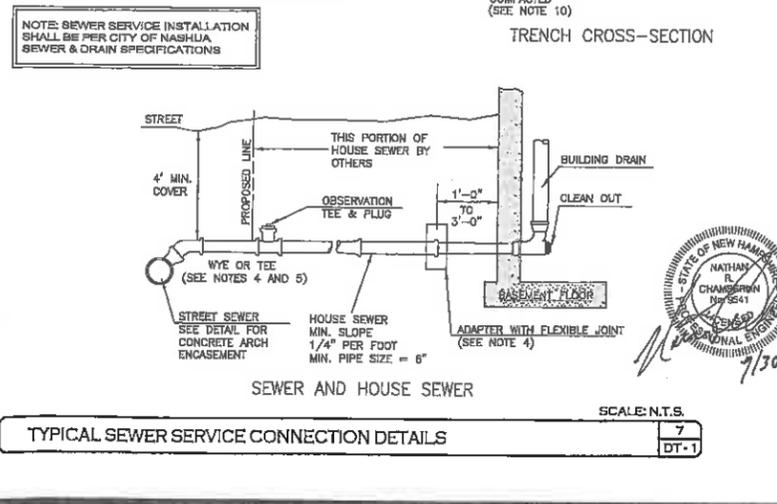
10. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATERIAL AND MEETING ASTM D-887:
100% PASSING 1/2" SCREEN
80-100% PASSING 3/8" SCREEN
20-50% PASSING 20 MESH SCREEN
0-10% PASSING #4 SIEVE
0-0% PASSING #6 SIEVE

WHEN ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, SCREENED GRAVEL OR CRUSHED STONE (1-1/2 TO 1/2 INCH) SHALL BE USED.

11. LOCATION THE LOCATION OF THE "Y" OR "Y" SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS METAL ROD OR PIPE SHALL BE PLACED OVER THE "Y" OR "Y", AS DESCRIBED IN THE TYPICAL "CHIMNEY" DETAIL, TO AID IN LOCATING THE BURIED PIPE WITH A COP NEEDLE OR PIPEFINDER.

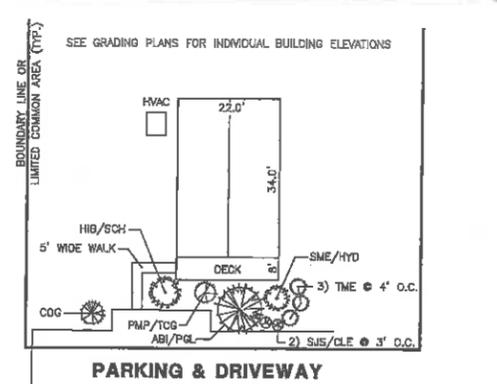
12. CONCRETE ENCASEMENT SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (3000 PSI) CONCRETE OF THE N.H. DEPT. OF TRANSPORTATION STANDARD SPECIFICATIONS AS FOLLOWS: CEMENT: 5.0 BAGS/CY; WATER: 2.75 GAL/BAG CEMENT AGGREGATE: 1" MAX

13. CHIMNEY: IF VERTICAL DROP INTO THE SEWER IS GREATER THAN 4 FEET, A CHIMNEY SHALL BE CONSTRUCTED FOR THE HOUSE CONNECTION. CHIMNEY INSTALLATION AS RECOMMENDED BY THE PIPE MANUFACTURER MAY BE USED IF APPROVED BY THE ENGINEER.



TYPICAL SEWER SERVICE CONNECTION DETAILS

| | |
|---|------|
| 7 | DT-1 |
|---|------|

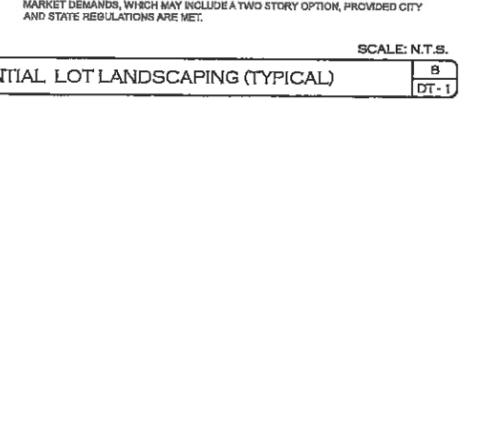


PLANT LEGEND

ABI ABIES CONCOLOR (WHITE FIR)
BET BETULA NIGRA (HERITAGE RIVER BIRCH MULTI-STEM)
CLE CLETHRA COMPACTA (COMPACT SUMMERSWEET)
COG CHAMAECYPARIS OBUSA (GRADUIS HINCKI FALSECYPRESS)
HYD HYDRANGEA PANICULATA (COMPACT P.F., LINELIGHT HYDRANGEA)
HYD PICEA GLAUCA (WHITE SPRUCE)
HYD RHODODENDRON SPECIES (FURN HYBRIDS)
PJM PINUS MICO PUMILO (DWARF MUGO PINE)
RHM RHODODENDRON MEDIUM TALL (GUINNINGHAM, BOULE DE NEIGE, BOURSALUT)
SCH SYRINGA CHINENSIS (CHINESE LILAC)
SCR SPIRAEA X. B. (CRISP LEAF SPIREA)
SUS SPIREA JAPONICA (SHIBORI SPIREA)
SME SYRINGA PATULA (MISS SUSIE LILAC)
STE STEWARTIA PSEUDOCAMELLIA (JAPANESE STEWARTIA)
TCG TAXUS CLUSIPATA (GREENWAVE YEW)
TME TAXUS MEDIA (EVER-LOW YEW)

NOTES:
1. THERE SHALL BE ONE SHADE TREE PER 40 LINEAR FOOT OF ROAD FRONTAGE.
2. ALL SHRUBS ARE TO BE 24" HIGH WHEN PLANTED. ALL TREES ARE TO BE 2 TO 2-1/2 INCHES CAL. WHEN PLANTED.
3. ALL NORTH & EAST ORIENTED UNITS SHALL BE PLANTED WITH THESE NOTED SHADE/SEMI-SHADE PLANT SELECTIONS.
4. THE OWNER RESERVES THE RIGHT TO CHANGE THE HOUSE STYLE TO MEET MARKET DEMANDS, WHICH MAY INCLUDE A TWO STORY OPTION, PROVIDED CITY AND STATE REGULATIONS ARE MET.

SCALE: N.T.S.



| REV. | DATE | DESCRIPTION | C/O | DR | CK |
|------|------|-------------|-----|----|----|
| - | - | - | - | - | - |

CONSTRUCTION DETAILS
TAX MAP 60 LOT 65
(133 AMHERST STREET)
NASHUA, NEW HAMPSHIRE
PREPARED FOR & LAND OF
COLINBROOKE HOMES, LLC
11 MCINTOSH LANE BEDFORD, NH 03110

SCALE: N.T.S. JULY 14, 2020

Surveying ♦ Engineering ♦ Land Planning ♦ Permitting ♦ Septic Designs

FIELDSTONE
LAND CONSULTANTS, PLLC

205 Elm Street, Milford, NH 03055
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FILE 228801.dwg PROJ. NO. 2288.01 SHEET: DT-1 PAGE NO. 7 OF 11

- ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE REQUIREMENTS AND SPECIFICATIONS OF THE CITY OF NASHUA.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THE LOCATION, SIZE, AND ELEVATION OF ALL EXISTING UTILITIES SHOWN OR NOT SHOWN ON THESE PLANS AND SHALL VERIFY THAT ALL THE INFORMATION SHOWN HEREON IS CONSISTENT, COMPLETE, ACCURATE, AND CAN BE CONSTRUCTED PRIOR TO AND/OR DURING CONSTRUCTION. FIELDSTONE LAND CONSULTANTS, PLLC, AS THE DESIGN ENGINEER, SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCIES, ERRORS, OMISSIONS, OR EXISTING UTILITIES FOUND INTERFERING WITH THE PROPOSED CONSTRUCTION SO THAT REMEDIAL ACTION MAY BE TAKEN BEFORE PROCEEDING WITH THE WORK.
- THE CONTRACTOR SHALL CONTACT "DIGSAFE" 72 HOURS PRIOR TO THE START OF CONSTRUCTION (1-800-255-4977 IN NH, 1-888-344-7233 IN MA).
- COMPLIANCE WITH ALL APPLICABLE REGULATIONS AND SPECIAL CONDITIONS OF TOWN/CITY AGENCIES, SUCH AS THE PLANNING BOARD, ZONING BOARD, CONSERVATION COMMISSION, AND OTHERS, IS MANDATORY AND IS THE RESPONSIBILITY OF THE OWNER.
- ANY ALTERATION OF THIS DESIGN OR CHANGE DURING CONSTRUCTION MAY REQUIRE APPROVAL OF VARIOUS TOWN/CITY BOARDS OR AGENCIES AND SHALL BE DISCUSSED WITH THE OWNER AND FIELDSTONE LAND CONSULTANTS, PLLC PRIOR TO CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR CONTACTING THE APPROPRIATE CITY DEPARTMENTS PRIOR TO CONSTRUCTION TO ARRANGE FOR NECESSARY INSPECTIONS.
- THE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ACCURATE AS-BUILT INFORMATION OF ALL WORK, ESPECIALLY UNDERGROUND CONSTRUCTION OF UTILITY LINES, SERVICES, CONNECTIONS, ETC. AND APPROPRIATE TIES TO ABOVE GROUND PERMANENT STRUCTURES, FIELD SURVEY COORDINATES, OR SOME OTHER METHOD OF ESTABLISHING THE AS-BUILT CONDITION OF ALL CONSTRUCTION.
- THE CONTRACTOR AND OWNER ARE RESPONSIBLE FOR OBSERVING AND MANAGING THE PROJECT PER RSA 430:53 AND AGR 3800 REGARDING INVASIVE SPECIES (PLANTS AND INSECTS). NO INVASIVE SPECIES PLANT OR INSECT SHALL BE INTRODUCED ONTO THE SITE.

GENERAL CONSTRUCTION NOTES 1 DT-2

- CATCH BASINS, PIPE INLETS, DRAINAGE BASINS AND SPILLWAYS SHALL BE INSPECTED AFTER EVERY MAJOR STORM FOR POLLUTANT BUILD-UP. POLLUTANTS CONSIST OF SEDIMENTS, DEBRIS AND/OR FLOATING HYDROCARBONS.
- IN THE ABSENCE OF A MAJOR STORM, THE SYSTEM MUST BE CHECKED AT LEAST TWICE A YEAR, IN THE SPRING AND FALL FOR HYDROCARBON ACCUMULATION.
- IF, UPON INSPECTION, A SIGNIFICANT AMOUNT OF POLLUTANTS HAVE ACCUMULATED IN ANY OF THE CATCH BASINS, THEN THE POLLUTANTS MUST BE REMOVED AND DISPOSED OF PROPERLY.
- A SIGNIFICANT AMOUNT OF POLLUTANTS SHALL BE DEFINED AS A NOTICEABLE SHEEN ON THE WATER SURFACE IN THE SUMPS OF ANY CATCH BASINS AND/OR WHEN SEDIMENTS HAVE ACCUMULATED TO WITHIN 8 INCHES BELOW THE OUTLET OF ANY OF THE CATCH BASINS. WHEN EITHER OF THESE SITUATIONS ARE DISCOVERED UPON THE REQUIRED SEMIANNUAL INSPECTION, THEN THE STEPS STATED ABOVE SHALL BE COMPLETED.
- THE DRAINAGE BASIN EMBANKMENTS SHOULD BE INSPECTED FOR RODENT BURROWS, BARE SPOTS, WET AREAS OR EROSION. ANY DEFICIENCIES SHALL BE CORRECTED TO PREVENT ADDITIONAL DAMAGE.
- PIPE OUTLETS SHOULD BE INSPECTED ANNUALLY AND AFTER EVERY MAJOR STORM. THE CONDITION OF THE PIPES SHOULD BE NOTED AND REPAIRS MADE AS NECESSARY. IF EROSION IS TAKING PLACE THEN MEASURES SHOULD BE TAKEN TO STABILIZE AND PROTECT THE ERODED AREA OF THE OUTLET.

STORMWATER MAINTENANCE NOTES 2 DT-2

- INSTALL STONE CHECK DAMS AND SILTATION CONTROL FENCES IN LOCATIONS SHOWN ON PLANS. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATION.
- INSTALL STABILIZED CONSTRUCTION ENTRANCES.
- CUT AND CLEAR TREES; DISPOSE OF DEBRIS. STUMPS ARE TO BE BURIED ON SITE AT THE LOCATIONS SHOWN. STUMPS SHALL BE COMPACTED AND ALL VOIDS FILLED WITH SUITABLE MATERIAL. COVER WITH 4" OF LOAM AND SEED PER THE EROSION CONTROL NOTES.
- REMOVE TOPSOIL AND STOCKPILE AWAY FROM ANY WETLAND. STABILIZE STOCKPILE IMMEDIATELY BY SEEDING. PLACE SILT FENCE AROUND THE DOWN SLOPE SIDE OF EARTH STOCKPILES.
- ROUGH GRADE SITE - CONSTRUCT DRAINAGE BASINS AND DRAINAGE SWALES DURING INITIAL PORTION OF CONSTRUCTION. STABILIZE IMMEDIATELY PER THE CONSTRUCTION AND EROSION CONTROL DETAILS. DO NOT DIRECT STORM WATER RUNOFF TO THESE STRUCTURES UNTIL A HEALTHY VEGETATIVE COVER IS ESTABLISHED.
- CONSTRUCT ROAD AND INSTALL DRAINAGE PIPES AND STRUCTURES. ALL CUT AND FILL SLOPES SHALL BE STABILIZED UPON COMPLETION OF ROUGH GRADING PER THE EROSION CONTROL NOTES.
- PLACE STONE CHECK DAMS AROUND INLETS AROUND ALL STRUCTURES UNTIL ROAD AND PARKING AREAS ARE PAVED AND ALL NON-PAVED DISTURBED AREAS HAVE A HEALTHY VEGETATIVE COVER. SILT SACKS MAY BE UTILIZED IN PLACE OF STONE CHECK DAMS ON CATCH-BASINS.
- INSPECT AND MAINTAIN EROSION CONTROL MEASURES ON A WEEKLY BASIS AND AFTER EVERY 0.5" OR GREATER RAINFALL.
- DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, CULVERTS, DITCHES, SILTATION FENCES, SEDIMENT TRAPS, ETC. MULCH AND SEED AS REQUIRED.
- FINISH GRADING TO PREPARE FOR PAVING AND LOAMING. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING.
- FINISH PAVING. PERMANENT SEEDING SHALL BE PERFORMED UPON COMPLETION OF DRIVE AND PARKING AREA PAVING (SEE EROSION CONTROL NOTES).
- COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED WHEN ALL DISTURBED AREAS HAVE BEEN STABILIZED.
- IN AN EFFORT TO RESTORE ADEQUATE INFILTRATION RATES OF THE BASINS PRIOR TO USE, THE BASES OF THE INFILTRATION BASINS SHALL BE DEEPLY TILLED AND THEN FOLLOWED BY A PASS WITH A LEVELING DRAG. STORMWATER FLOWS ARE NOT TO BE DIRECTED INTO THE INFILTRATION BASINS UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
- ALL STRUCTURES SHALL BE CLEANED OF SEDIMENTS ONCE CONSTRUCTION IS COMPLETE.

CONSTRUCTION SEQUENCE NOTES 3 DT-2

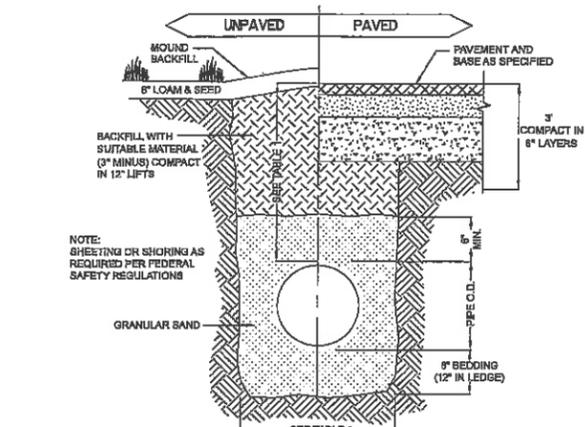


TABLE 1 (RECOMMENDED COVER)

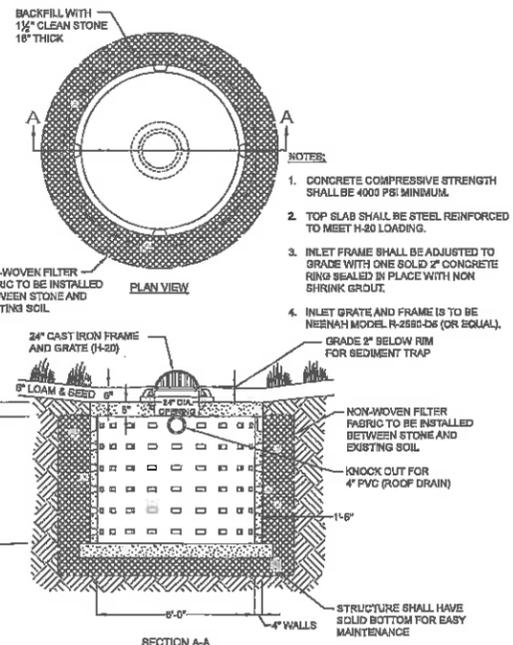
| LOCATION | PIPE MATERIAL | MINIMUM COVER |
|---------------|---------------|---------------|
| PAVED ROADS | ALL | 3 FT. |
| UNPAVED ROADS | ALL | 2 FT. |
| DRIVEWAYS | ALL | 1 FT. |
| UNPAVED AREAS | ALL | 2 FT. |

TABLE 2 (RECOMMENDED TRENCH WIDTH)

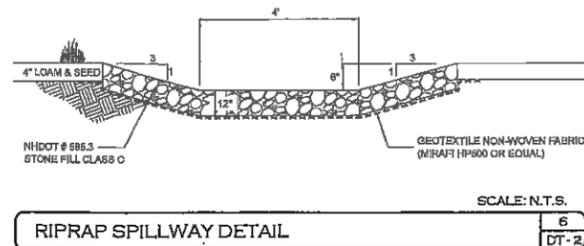
| INSIDE DIAMETER | TOTAL WIDTH |
|---------------------|-------------|
| 12" TO 24" OVER 24" | I.D. + 24" |
| | 2 X I.D. |

SCALE: N.T.S. 4 DT-2

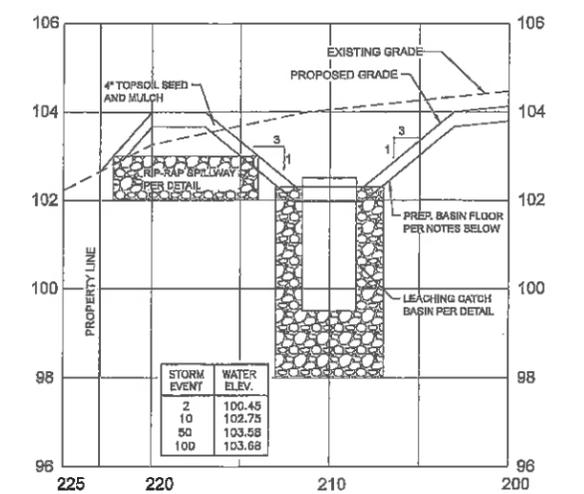
DRAINAGE TRENCH (TYPICAL) 4 DT-2



CATCH BASIN - LEACHING 5 DT-2

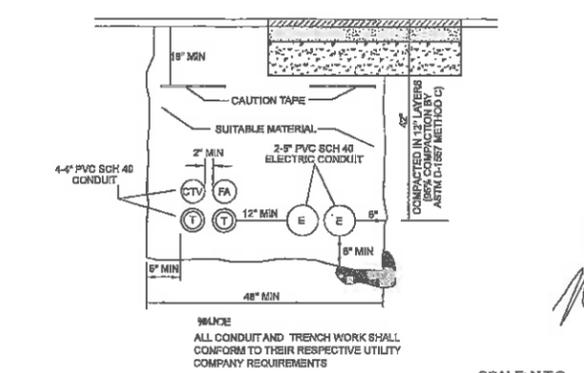


RIPRAP SPILLWAY DETAIL 6 DT-2

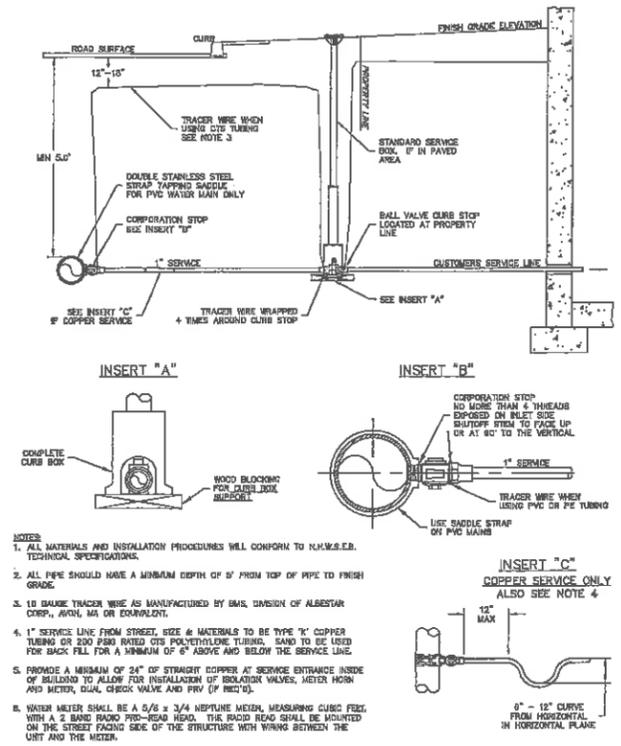


- INFILTRATION BASIN NOTES:**
- REMOVE ALL ORGANIC MATERIAL FROM AREA BELOW PROPOSED INFILTRATION BASINS TO EXPOSE THE UNDERLYING SOILS.
 - CARE SHALL BE TAKEN TO PROTECT THE UNDERLYING SOILS FROM CONSTRUCTION TRAFFIC AND THE DISCHARGE OF SEDIMENT LADEN RUNOFF.
 - ONCE EXCAVATED AND PRIOR TO FILLING, THE UNDERLYING SOILS SHALL BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH LEVELING DRAG.
 - THE BASIN FLOOR OF THE INFILTRATION BASINS SHALL BE PREPARED USING ONE OF THE FOLLOWING METHODS:
 - 8" LAYER OF COARSE SAND OR 8" PEA GRAVEL;
 - GRASS TURF WITH A HIGH INFILTRATION RATE (HIGH SAND CONTENT) THAT CAN BE ILLUMINATED FOR OVER 48 HOURS;
 - COARSE ORGANIC MATERIAL SUCH AS AN EROSION CONTROL MIX OR COMPOSTED MULCH THAT IS TILLED INTO THE SOIL, SOAKED, AND ALLOWED TO DRY.
 - DO NOT PLACE INFILTRATION BASINS INTO SERVICE UNTIL ALL CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

INFILTRATION BASIN 7 DT-2



TYPICAL UTILITY TRENCH 8 DT-2



WATER SERVICE CONNECTION DETAILS 9 DT-2

DRAINAGE DETAILS
TAX MAP 60 LOT 85
(133 AMHERST STREET)
NASHUA, NEW HAMPSHIRE
 PREPARED FOR & LAND OF:
COLINBROOKE HOMES, LLC
 11 MCINTOSH LANE BEDFORD, NH 03110

SCALE: N.T.S. JULY 14, 2020

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EROSION CONTROL (GENERAL CONSTRUCTION)

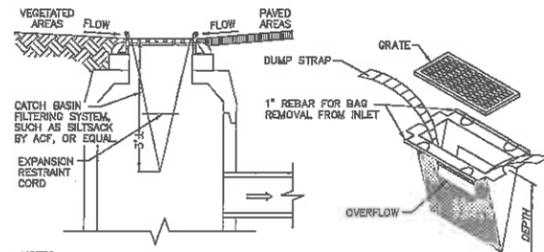
- PRIOR TO STARTING ANY WORK ON THE SITE THE CONTRACTOR SHALL NOTIFY APPROPRIATE AGENCIES.
- EROSION CONTROL MEASURES SHALL BE INSTALLED PER PLANS AND DETAILS. PERIMETER CONTROLS SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF EARTH DISTURBING ACTIVITIES.
- EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEN POSSIBLE.
- EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE KEPT CLEAN DURING CONSTRUCTION. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE A WEEK AND AFTER EVERY 0.5-INCH OR GREATER RAINFALL. SEDIMENTS SHALL BE DISPOSED OF IN AN UPLAND AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT OFF-SITE AND BE PERMANENTLY STABILIZED.
- THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION. AT NO TIME SHALL THE TOTAL UNSTABILIZED DISTURBED AREA, INCLUDING LOT DISTURBANCES, BE GREATER THAN FIVE (5) ACRES.
- THE LAND AREA EXPOSED SHALL BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME. ALL NON-ACTIVE DISTURBED AREAS SHALL BE STABILIZED WITHIN 90 DAYS OF THE DISTURBANCE. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS OF FINAL GRADING.
- DITCHES, SWALES AND DRAINAGE BASINS SHALL BE CONSTRUCTED DURING THE INITIAL PHASE OF CONSTRUCTION AND STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- AN AREA SHALL BE CONSIDERED STABILIZED IF ONE OF THE FOLLOWING HAS OCCURRED:
 - BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
 - A MINIMUM OF 45% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - A MINIMUM OF 3-INCHES OF NON-EROSIVE MATERIAL, SUCH AS STONE OR RIPRAP, HAS BEEN INSTALLED; OR
 - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
- EROSION CONTROL BLANKETS SHALL BE INSTALLED ON ALL SLOPES THAT ARE STEEPER THAN 3:1 (HORIZONTAL/VERTICAL), UNLESS OTHERWISE SPECIFIED THE CONTRACTOR SHALL USE NORTH AMERICAN GREEN SC160, OR APPROVED EQUAL.
- ALL AREAS RECEIVING EROSION CONTROL STONE OR RIPRAP SHALL HAVE A GEOTEXTILE MATERIAL INSTALLED BELOW THE STONE (SEE APPROPRIATE DETAILS).
- ALL DISTURBED AREAS TO BE TURF FINISHED SHALL BE COVERED WITH A MINIMUM THICKNESS OF 6 INCHES OF COMPACTED LOAM. LOAM SHALL BE COVERED WITH THE APPROPRIATE SEED MIXTURE AS INDICATED BELOW:

| PERMANENT SEEDS (ANN ARBOR) | 1 LB. / 1,000 SQ. FT. | PERMANENT SLOPESEED MIX | 1 LB. / 1,000 SQ. FT. |
|--|-----------------------|--|-----------------------|
| CREeping RED FESCUE | 0.82 LBS | CREeping RED FESCUE | 0.88 LBS |
| PERENNIAL RYEGRASS | 1.18 LBS | PERENNIAL RYEGRASS | 0.88 LBS |
| KENTUCKY BLUEGRASS | 0.69 LBS | REDTOP | 0.12 LBS |
| REDTOP | 0.12 LBS | ALEXIS CLOVER | 0.12 LBS |
| | | BIRDSEED TREFOIL | 0.12 LBS |
| **APPLICATION RATE TOTALS 2.8 LBS PER 1,000 SQ FT | | **APPLICATION RATE TOTALS 2.8 LBS PER 1,000 SQ FT | |
- APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. IF SOIL TESTING IS NOT FEASIBLE (CRITICAL TIME FRAMES OR VARIABLE SITES) THEN APPLY FERTILIZER AT A RATE OF 11 POUNDS PER 1,000 SQ FT AND LIMESTONE AT A RATE OF 90 POUNDS PER 1,000 SQ FT. FERTILIZER SHALL BE LOW PHOSPHATE (LESS THAN 10% PHOSPHORUS).
- CAUTION SHOULD BE TAKEN WHEN THE PROPERTY IS LOCATED WITHIN 500 FEET OF A WATER BODY. IN THIS CASE ALL FERTILIZERS SHALL BE LIMITED TO A LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER. SLOW RELEASE FERTILIZERS MUST BE AT LEAST 80% SLOW RELEASE NITROGEN COMPONENT. NO FERTILIZER EXCEPT LIMESTONE SHALL BE APPLIED WITHIN 25 FEET OF THE SURFACE WATER. THESE ARE ADDED LIMITATIONS.
- PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GRADING BEGINS (SEE WINTER CONSTRUCTION NOTES). NO DISTURBED AREAS SHALL BE LEFT EXPOSED DURING THE WINTER MONTHS.
- A VIGOROUS DUST CONTROL PROGRAM SHALL BE APPLIED BY THE SITE CONTRACTOR. DUST SHALL BE MANAGED THROUGH THE USE OF WATER AND/OR CALCIUM CHLORIDE.
- IN NO WAY ARE THE MEASURES INDICATED ON THE PLANS OR IN THESE NOTES TO BE CONSIDERED ALL INCLUSIVE. THE CONTRACTOR SHALL USE JUDGMENT TO INSTALL ADDITIONAL EROSION CONTROL MEASURES AS SITE CONDITIONS, WEATHER OR CONSTRUCTION METHODS WARRANT.
- FOLLOWING PERMANENT STABILIZATION, TEMPORARY EROSION CONTROL MEASURES SHALL BE REMOVED AND ACCUMULATED SEDIMENTATION IS TO BE DISPOSED OF IN AN APPROVED LOCATION, OUTSIDE OF JURISDICTIONAL WETLANDS.
- IN AN EFFORT TO RESTORE ADEQUATE INFILTRATION RATES OF THE BASINS PRIOR TO USE, THE BASINS OF THE INFILTRATION BASINS SHALL BE DEEPLY FILLED AND THEN FLOWED BY A FINE MESH FILTER FABRIC. STORMWATER FLOWS ARE NOT TO BE DIRECTED INTO THE INFILTRATION BASINS UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
- LOT DISTURBANCE OTHER THAN SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.
- THE CONTRACTOR AND OWNER ARE RESPONSIBLE FOR OBSERVING AND MANAGING THE PROJECT PER RSA 430-B AND ASR 8800 REGARDING INVASIVE SPECIES (PLANTS AND INSECTS). NO INVASIVE SPECIES PLANT OR INSECT SHALL BE INTRODUCED ONTO THE SITE.

EROSION CONTROL (WINTER CONSTRUCTION)

- ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED. STABILIZATION METHODS SHALL INCLUDE SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE. SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF TRUCK OR SPRING MOUNT EQUIPMENT.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATED GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL OR PROPERLY INSTALLED EROSION CONTROL BLANKETS COVERED WITH MULCH. OTHER STABILIZATION OPTIONS ARE TO BE APPROVED BY THE APPROPRIATE AGENCIES AND THE DESIGN ENGINEER. IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER MONTHS THEN THE ROAD SHOULD BE CLEARED OF ACCUMULATED SNOW AFTER EACH STORM EVENT.

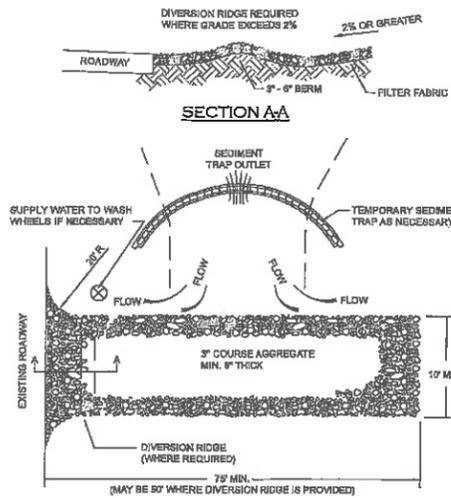
EROSION CONTROL NOTES



- NOTES:
- INSTALL AND MAINTAIN SACKS IN ALL CATCH BASINS.
 - TO INSTALL SACK, REMOVE CATCH BASIN GRATE AND PLACE SACK IN OPENING. HOLD OUT APPROXIMATELY SIX INCHES OF THE SACK OUTSIDE THE FRAME FOR THE LIFTING STRAPS. REPLACE THE GRATE TO HOLD THE SACK IN PLACE.
 - THE SACK SHOULD BE INSPECTED AFTER EVERY STORM, OR ONCE EVERY TWO WEEKS, WHICH EVER OCCURS FIRST.
 - THE RESTRAINT CORD SHOULD BE VISIBLE AT ALL TIMES; IF THE CORD IS COVERED WITH SEDIMENT, THE SACK SHOULD BE EMPTIED. EMPTY THE SACK AWAY FROM THE CATCH BASIN TO PREVENT SEDIMENT FROM RE-ENTERING THE CATCH BASIN. EMPTY THE SACK PER THE MANUFACTURER'S RECOMMENDATIONS.
 - REPLACE THE SACK IN THE CATCH BASIN AFTER THE SACK HAS BEEN EMPTIED. ONCE CONSTRUCTION IS COMPLETE AND ALL DISTURBED AREAS HAVE BEEN STABILIZED BY PAVING OR A HEALTHY VEGETATIVE COVER, REMOVE THE SACK FROM THE CATCH BASIN.

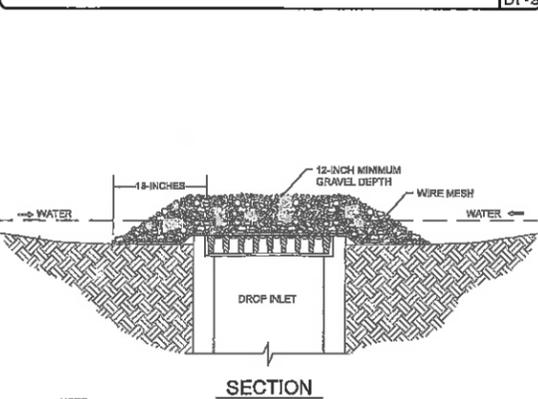
SILT SACK SEDIMENT FILTER

2
DT-3



- NOTES:
- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT.
 - THE MINIMUM STONE USED SHOULD BE 3-INCH CRUSHED STONE.
 - THE MINIMUM LENGTH OF THE PAD SHOULD BE 75 FEET, EXCEPT THAT THE MINIMUM LENGTH MAY BE REDUCED TO 60 FEET IF A 3-INCH TO 6-INCH HIGH BERM IS INSTALLED AT THE ENTRANCE OF THE PROJECT SITE.
 - THE PAD SHOULD EXTEND THE FULL WIDTH OF THE CONSTRUCTION ACCESS ROAD OR LOT FEG, WHICHEVER IS GREATER.
 - THE PAD SHOULD SLOPE AWAY FROM THE EXISTING ROADWAY.
 - THE PAD SHOULD BE AT LEAST 6-INCHES THICK.
 - THE GEOTEXTILE FILTER FABRIC SHOULD BE PLACED BETWEEN THE STONE PAD AND THE EARTH SURFACES BELOW THE PAD.
 - THE PAD SHALL BE MAINTAINED OR REPLACED WHEN MUD AND SOIL PARTICLES CLOG THE VOIDS IN THE STONE SUCH THAT MUD AND SOIL PARTICLES ARE TRACKED OFF-SITE.
 - NATURAL DRAINAGE THAT CROSSES THE LOCATION OF THE STONE PAD SHOULD BE INTERCEPTED AND PIPED BENEATH THE PAD, AS NECESSARY, WITH SUITABLE OUTLET PROTECTION.
 - WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.
 - WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.

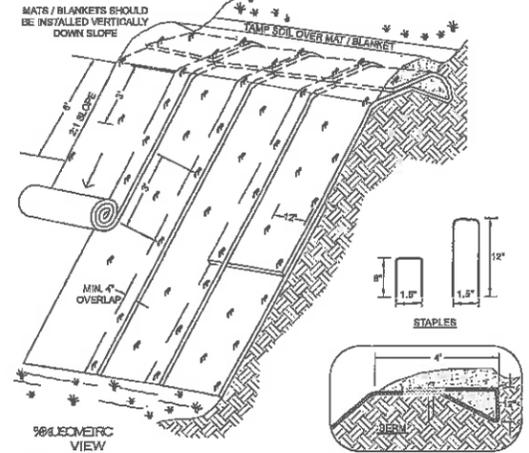
GRAVEL CONSTRUCTION EXIT



- NOTE:
- DROP INLET SEDIMENT BARRIERS ARE TO BE USED FOR SMALL, NEARLY LEVEL DRAINAGE AREAS (LESS THAN 5%).
 - THIS TYPE OF BARRIER HAS NO OVERFLOW PROMISION, WILL RESULT IN PONDING IF THE SEDIMENT IS NOT REMOVED REGULARLY AND SHOULD THEREFORE NOT BE USED WHEN OVERFLOW MAY ENDANGER DOWN SLOPE AREAS.
 - THE WIRE MESH SHOULD BE PLACED OVER THE DROP INLET SO THAT THE ENTIRE OPENING AND A MINIMUM OF 12-INCHES AROUND THE OPENING ARE COVERED BY THE MESH.
 - THE WIRE MESH SHOULD BE HARDWARE CLOTH OR WIRE WITH OPENINGS UP TO ONE HALF INCH.
 - THE GRAVEL FILTER SHOULD BE CLEAN COARSE AGGREGATE.
 - THE GRAVEL SHOULD EXTEND AT LEAST 18-INCHES ON ALL SIDES OF THE DRAIN OPENING AND SHALL BE AT LEAST 12-INCHES IN DEPTH.
 - IF THE STONE FILTER BECOMES CLOGGED WITH SEDIMENT SO THAT IT NO LONGER ADEQUATELY PERFORMS ITS FUNCTION, THE STONES MUST BE PULLED AWAY FROM THE STRUCTURE, CLEANED AND REPLACED.

GRAVEL & WIRE MESH SEDIMENT BARRIER

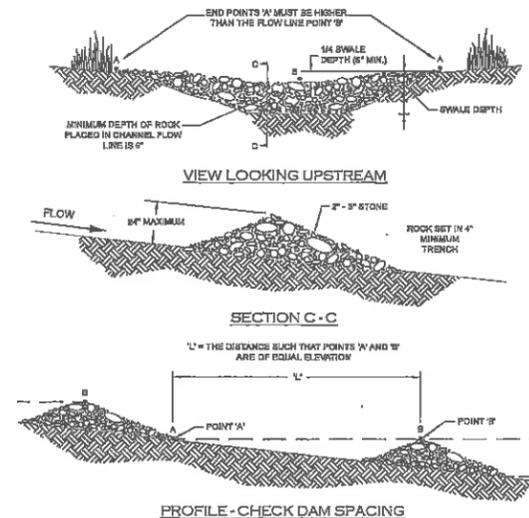
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4
DT-3



- NOTES:
- DIMENSIONS GIVEN IN THIS DETAIL ARE EXAMPLES; DEVICE SHOULD BE INSTALLED PER MANUFACTURER'S SPECIFICATIONS.
 - INSTALL STRAWWOODCONUT FIBER EROSION CONTROL MAT SUCH AS NORTH AMERICAN GREEN SC160 OR EQUAL ON ALL SLOPES EXCEEDING 3 HORIZ: 1 VERT.
 - THE EROSION CONTROL MATERIAL(S) SHALL BE ANCHORED WITH 1/2\"/>

EROSION BLANKETS - SLOPE INSTALLATION

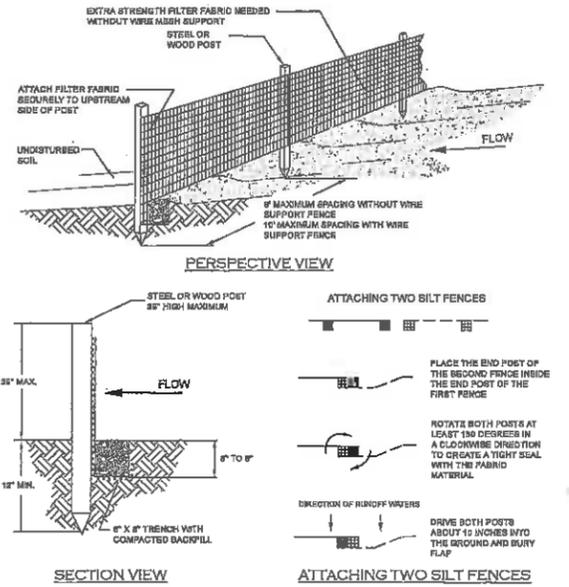
SCALE: N.T.S.
5
DT-3



- NOTES:
- STONE CHECK DAMS SHOULD BE INSTALLED BEFORE RUNOFF IS DIRECTED TO THE SWALE OR DRAINAGE DITCH.
 - THE MAXIMUM CONTRIBUTING DRAINAGE AREA TO THE CHECK DAM SHOULD BE LESS THAN ONE ACRE.
 - STONE CHECK DAMS SHOULD NOT BE USED IN A FLOWING STREAM.
 - STONE CHECK DAMS SHOULD BE CONSTRUCTED OF WELL-GRADED ANGULAR 2 TO 3 INCH STONE. THE INSTALLATION OF 3/4-INCH STONE ON THE UPGRADIENT FACE IS RECOMMENDED FOR BETTER FILTERING.
 - WHEN INSTALLING STONE CHECK DAMS THE CONTRACTOR SHALL KEY THE STONE INTO THE CHANNEL BANKS AND EXTEND THE STONE BEYOND THE ABUTMENTS A MINIMUM OF 18-INCHES TO PREVENT FLOW AROUND THE DAM.
 - STONE CHECK DAMS SHOULD BE REMOVED ONCE THE SWALE OR DITCH HAS BEEN STABILIZED UNLESS OTHERWISE SPECIFIED.

STONE CHECK DAM

SCALE: N.T.S.
6
DT-3



- NOTES:
- SILT FENCES SHOULD NOT BE USED ACROSS STREAMS, CHANNELS, SWALES, DITCHES OR OTHER DRAINAGEWAYS.
 - SILT FENCE SHOULD BE INSTALLED FOLLOWING THE CONTOUR OF THE LAND AS CLOSELY AS POSSIBLE AND THE ENDS OF THE SILT FENCE SHOULD BE FLARED UP SLOPE.
 - IF THE SITE CONDITIONS INCLUDE FROZEN GROUND, LEDGE OR THE PRESENCE OF HEAVY ROOTS THE BASE OF THE FABRIC SHOULD BE EMBEDDED WITH A MINIMUM THICKNESS OF 6 INCHES OF 3/4-INCH STONE.
 - SILT FENCES PLACED AT THE TOE OF SLOPES SHOULD BE INSTALLED AT LEAST 6 FEET FROM THE TOE TO ALLOW SPACE FOR SHALLOW PONDING AND ACCESS FOR MAINTENANCE.
 - THE MAXIMUM SLOPE ABOVE THE FENCE SHOULD BE 2:1 AND THE MAXIMUM LENGTH OF SLOPE ABOVE THE FENCE SHOULD BE 100 FEET.
 - REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE TO SEDIMENT OFF-SITE AND CAN BE PERMANENTLY STABILIZED.
 - SILT FENCES SHOULD BE REMOVED WHEN THE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED.

SILT FENCE

SCALE: N.T.S.
7
DT-3

| REV. | DATE | DESCRIPTION | C/O | DR | CK |
|------|------|-------------|-----|----|----|
| | | | | | |

EROSION CONTROL DETAILS
TAX MAP 60 LOT 65
(133 AMHERST STREET)
NASHUA, NEW HAMPSHIRE
 PREPARED FOR & LAND OF:
COLINBROOKE HOMES, LLC
 11 MCINTOSH LANE BEDFORD, NH 03110

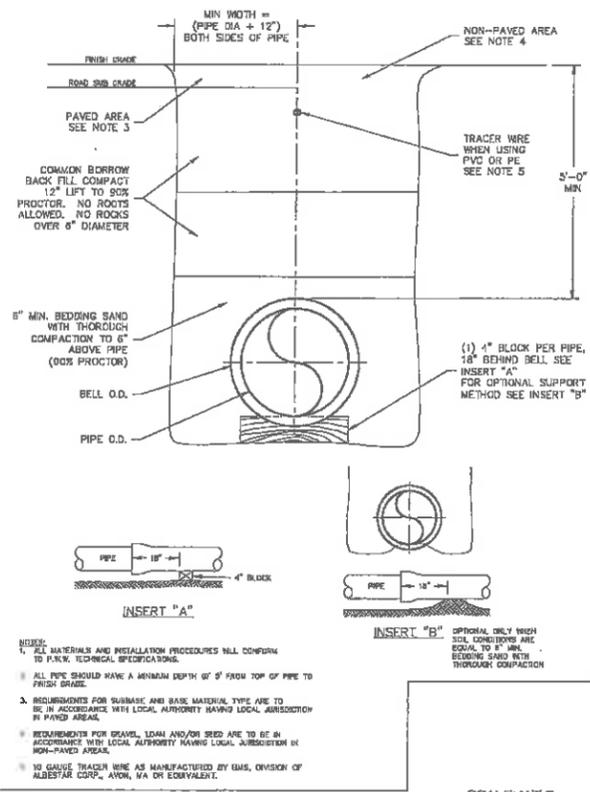
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Surveying ♦ Engineering ♦ Land Planning ♦ Permitting ♦ Septic Designs

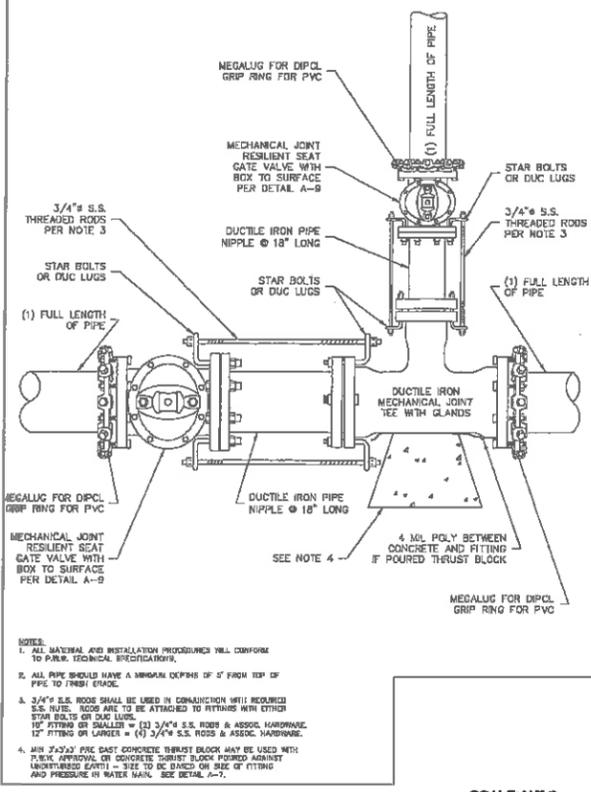
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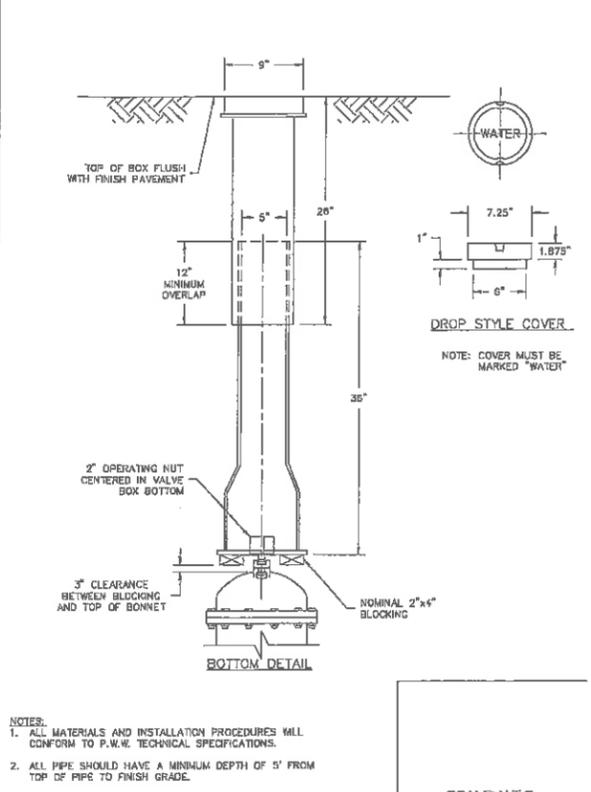
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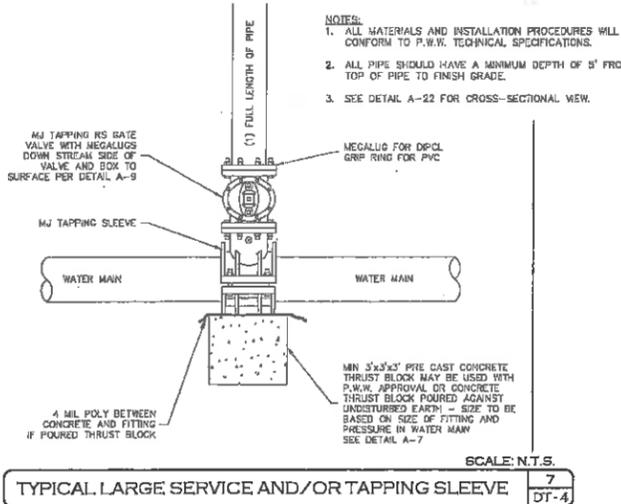
TYPICAL TRENCH DETAIL 1 DT-4



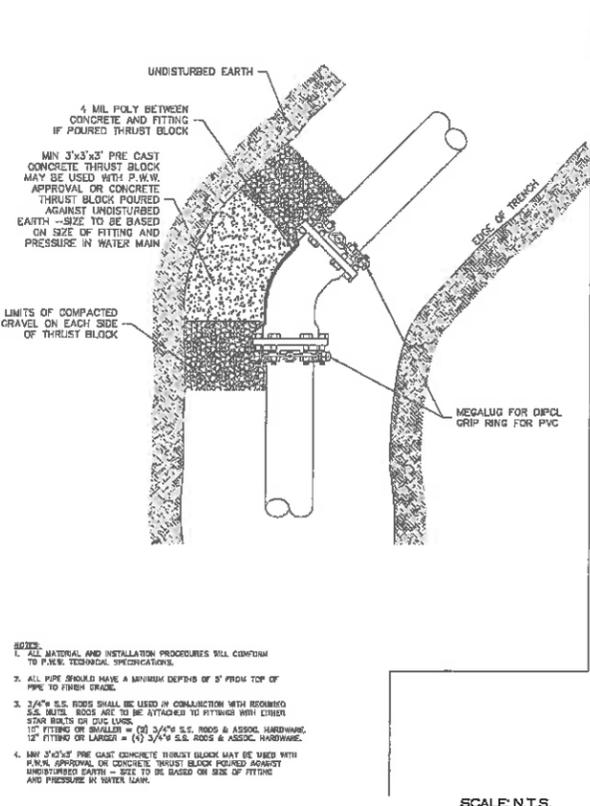
TYPICAL TEE INSTALLATION 3 DT-4



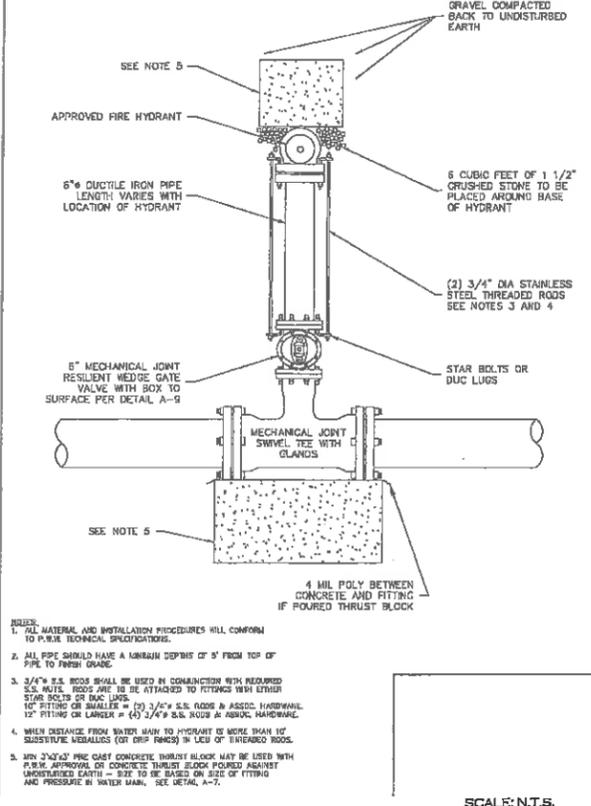
TYPICAL VALVE BOX 5 DT-4



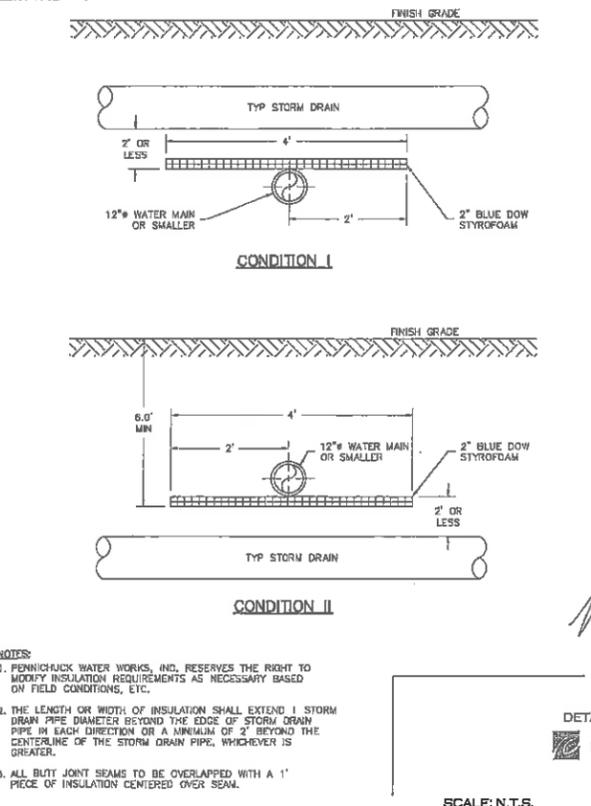
TYPICAL LARGE SERVICE AND/OR TAPPING SLEEVE 7 DT-4



TYPICAL THRUST BLOCK BEHIND FITTINGS 2 DT-4



TYPICAL HYDRANT INSTALLATION 4 DT-4



STORM DRAIN / WATER MAIN INTERSECTING RUNS 6 DT-4

- REFERENCE PENNICHUCK WATER WORKS SPECIFICATIONS FOR INSTALLATION OF ALL WATER LINES.**
- ALL SPRINKLER AND DOMESTIC LEADS TO BUILDING SHALL END 8 FEET OUTSIDE THE FACE OF THE BUILDING WALL UNLESS NOTED, AND SHALL BE PROVIDED WITH A TEMPORARY PLUG AT THE END (FOR OTHERS TO REMOVE AND EXTEND THE LINE AS NECESSARY).
 - THRUST BLOCKS AND MEGALUG RESTRAINTS SHALL BE PROVIDED AT ALL HORIZONTAL BENDS, TEES, AND FIRE HYDRANTS. SEE DETAIL.
 - MINIMUM COVER ON ALL WATER LINES IS 6'-5".
 - CONTRACTOR SHALL MAINTAIN A 6'-0" HORIZONTAL (UNLESS OTHERWISE NOTED) AND 12" VERTICAL SEPARATION BETWEEN WATER SERVICE AND UTILITIES OTHER THAN SANITARY SEWER.
 - INSPECTIONS ON WATER SERVICE INSTALLATION DURING CONSTRUCTION IS THE RESPONSIBILITY OF THE SITE CONTRACTOR AND SHALL BE COORDINATED WITH PENNICHUCK WATER WORKS. ALL INSPECTION FEES SHALL BE PAID FOR BY THE CONTRACTOR.
 - CONTRACTOR SHALL HAVE BACTERIOLOGICAL AND PRESSURE TESTING PERFORMED. CONTRACTOR SHALL GIVE PENNICHUCK WATER WORKS A COPY OF THE RESULTS. PENNICHUCK WATER WORKS SHALL BE ON-SITE TO WITNESS TEST.
 - ALL PIPE, VALVES, MISCELLANEOUS MATERIALS AND INSTALLATION SHALL CONFORM TO PENNICHUCK WATER WORKS SPECIFICATIONS AND REQUIREMENTS.
 - ALL FIRE HYDRANTS, VALVES, FITTINGS, PIPES, ETC. SHALL BE IN ACCORDANCE WITH PENNICHUCK WATER WORKS SPECIFICATIONS.
 - METALLIC TAPE OR DETECTOR WIRE SHALL BE INSTALLED IN THE SAME TRENCH WITH ALL NONMETALLIC PIPE SUCH THAT THE PIPE MAY BE LOCATED WITH ELECTRONIC LOCATING EQUIPMENT. METALLIC TAPE OR DETECTOR WIRE SHALL BE INSTALLED APPROXIMATELY 12" TO 18" BELOW GRADE DIRECTLY ABOVE THE TOP OF THE PIPE. DETECTOR WIRE SHALL BE 14 GAUGE SOLID COPPER, SIMPLEX BMS001 OR EQUAL. METALLIC TAPE SHALL BE 2" MINIMUM METALLIZED TAPE, GRIFFOLYN COMPANY, INC., TERRATAPE OR EQUAL.
 - CONTRACTOR SHALL ENSURE ALL WATER VALVES ARE IN A FULLY OPEN POSITION UPON COMPLETION OF PROJECT.
 - CONTRACTOR SHALL COORDINATE ALL WATER INTERRUPTIONS WITH PENNICHUCK WATER WORKS AND AFFECTED PROPERTY OWNERS.

WATER SYSTEM CONSTRUCTION NOTES 8 DT-4

WATER DETAILS
TAX MAP 60 LOT 65
(133 AMHERST STREET)
NASHUA, NEW HAMPSHIRE
 PREPARED FOR & LAND OF:
COLINBROOKE HOMES, LLC
 11 MCINTOSH LANE BEDFORD, NH 03110

SCALE: N.T.S. JULY 14, 2020

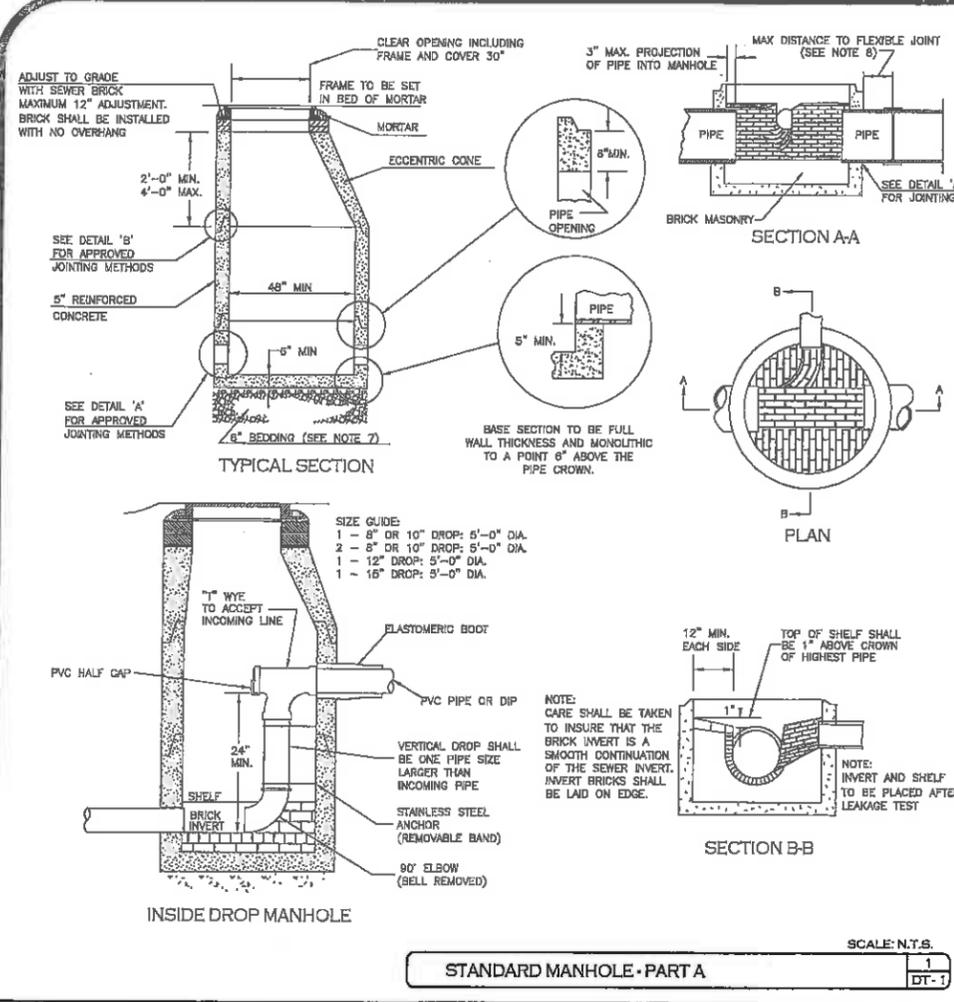
Surveying ♦ Engineering ♦ Land Planning ♦ Permitting ♦ Septic Designs

DETAILS PROVIDED BY:
PENNICHUCK WATER

FIELDSTONE
 LAND CONSULTANTS, PLLC

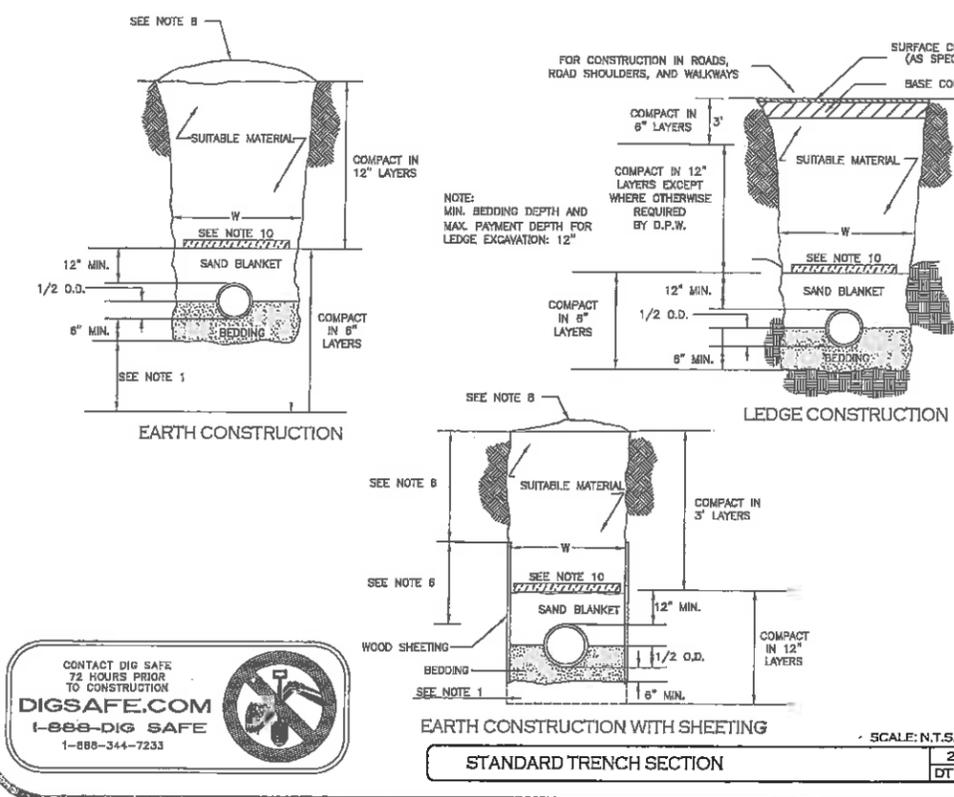
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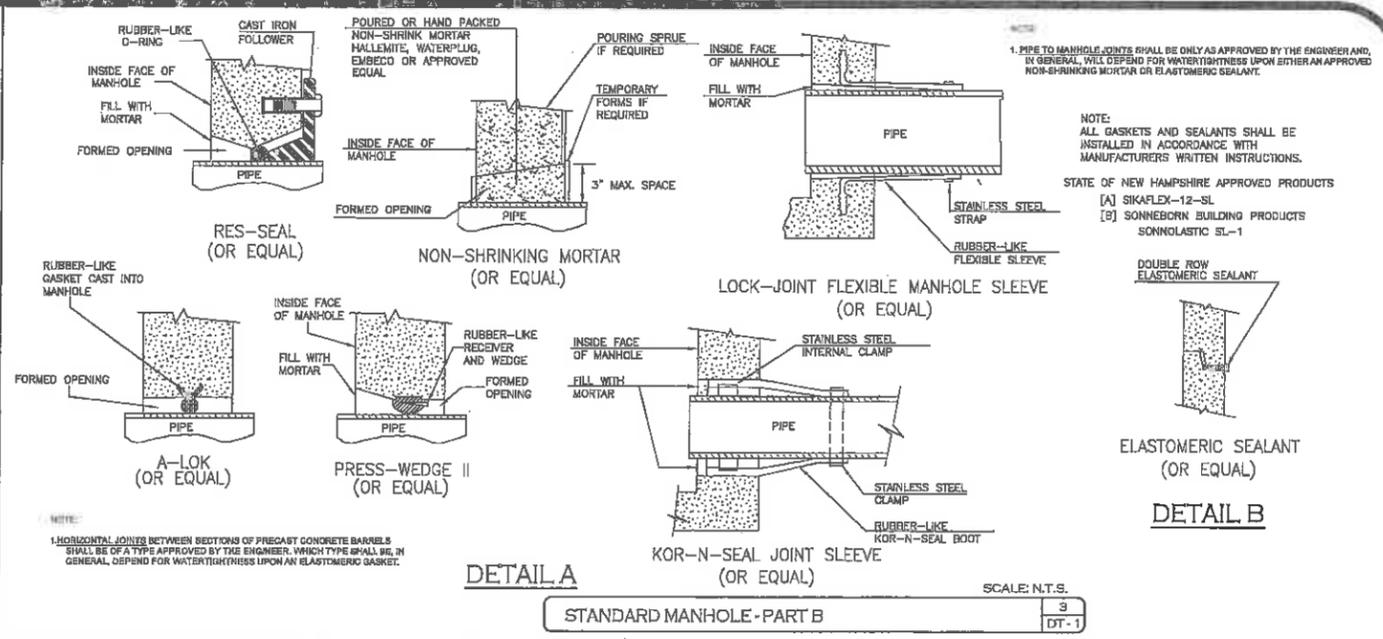
NOTES:

- IT IS INTENDED THAT THE MANHOLE, INCLUDING ALL COMPONENT PARTS, HAVE ADEQUATE STRENGTH AND LEAKPROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE SPACE REQUIREMENTS AND CONFIGURATIONS SHALL BE AS SHOWN ON THE DRAWING. MANHOLES MAY BE AN ASSEMBLY OF PRECAST SECTIONS WITH STEEL REINFORCEMENT, WITH ADEQUATE JOINTING PER ENR-WQ 704.12 (b). IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (8-20 LBS) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE CONTINUOUSLY FOR THE LIFE OF THE STRUCTURE. A PERIOD GENERALLY IN EXCESS OF 25 YEARS IS TO BE UNDERSTOOD IN BOTH CASES.
- BARRELS AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE.
- PRECAST CONCRETE BARREL SECTIONS, CONES, AND BASES SHALL CONFORM TO ASTM C 478.
- BASE SECTIONS SHALL BE MONOLITHIC TO A POINT ABOVE THE CROWN OF THE INCOMING PIPE, AND SHALL BE PRE-CAST REINFORCED CONCRETE.
- INVERTS AND SHELVES: MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT CONSTRUCTED TO CONFORM TO THE DIRECTION OF FLOW. THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE SEWER PIPES. SHELVES SHALL BE CONSTRUCTED TO THE ELEVATION OF THE HIGHEST PIPE. CROWN AND SLOPE TO DRAIN TOWARD THE FLOW THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF BRICK MASONRY.
- FRAMES AND COVERS: MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN EQUAL TO CLASS 39, CONFORMING TO ASTM A548 AND PROVIDE A 30 INCH CLEAR OPENING. THE COVERS SHALL BE THE WORD "SEWER" IN 1 INCH HIGH LETTERS SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.
- BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33 SIZE #67, 100% PASSING 1 INCH SCREEN, 90-100% PASSING 3/8 INCH SCREEN, 20-50% PASSING 3/16 INCH SCREEN, 0-10% PASSING #4 SIEVE, 0-5% PASSING #8 SIEVE. WHERE ORDERED BY THE ENGINEER TO STABILIZE THE BASE, SCREENED GRAVEL OR CRUSHED STONE 1-1/2 TO 3/4 INCH SHALL BE USED.
- FLEXIBLE JOINT: A FLEXIBLE JOINT SHALL BE PROVIDED WITHIN THE FOLLOWING DISTANCES: TOP 4 FT OF PIPE - ALL SIZES - 48" PVC PIPE - UP THROUGH 15" DIAMETER - NO FLEXIBLE JOINT REQUIRED.
- SHALLOW MANHOLE IN LIEU OF A CONE SECTION, WHEN MANHOLE DEPTH IS LESS THAN 8 FEET, A REINFORCED CONCRETE SLAB COVER MAY BE USED. IT MUST HAVE AN ECCENTRIC ENTRANCE OPENING AND BE CAPABLE OF SUPPORTING H-20 LOADING.
- HORIZONTAL JOINTS BETWEEN SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF AN OVERLAPPING TYPE, SEALED WITH A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT IN ACCORDANCE WITH ENR-WQ 704.12 (b). A TYPE APPROVED BY THE ENGINEER, WHICH TYPE SHALL, IN GENERAL, DEPEND UPON WATER TIGHTNESS UPON AN MASTIC-LIKE OR ELASTOMERIC SEALANT.
- PIPE TO MANHOLE JOINTS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF ENR-WQ 704.12 (g) AS SHOWN HEREON (DETAIL A).
- MATERIAL REQUIREMENTS FOR BRICK AND MORTAR SHALL CONFORM TO ENR-WQ 704.13 (a) (3) AND ENR-WQ 704.13 (b).
- ALL PRECAST SECTIONS AND BASES SHALL HAVE THE DATE OF MANUFACTURE AND THE NAME OF THE MANUFACTURER STAMPED ON THE INSIDE WALL.
- ALL PRECAST SECTIONS AND BASES SHALL BE COATED ON THE EXTERIOR WITH A BITUMINOUS DAMP-PROOF COATING PER ENR-WQ 704.12 (j).
- NO STEPS ARE TO BE PROVIDED WITHIN THE MANHOLE.
- SEWER MANHOLES SHALL BE TESTED IN ACCORDANCE WITH ENR-WQ 704.17.
- ALL SEWER CONSTRUCTION SHALL CONFORM TO SPECIFICATIONS DEFINED BY CITY OF NASHUA STANDARD SPECIFICATIONS FOR ROAD CONSTRUCTION. THESE STANDARD MANHOLE DRAWINGS DO NOT COMPLETE WITHOUT THESE SPECIFICATIONS AND INDEX CHAPTER ENR-WQ 703.



NOTES:

- ORDERED EXCAVATION OF UNSUITABLE MATERIAL BELOW GRADE, REFILL WITH BEDDING MATERIAL. (SEE ALSO NOTE 7).
- BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33, STONE SIZE #67, 100% PASSING 1 INCH SCREEN, 90-100% PASSING 3/8 INCH SCREEN, 20-50% PASSING 3/16 INCH SCREEN, 0-10% PASSING #4 SIEVE, 0-5% PASSING #8 SIEVE.
- SAND BLANKET: CLEAN SAND, FREE FROM ORGANIC MATTER, SO GRADED THAT 90-100% PASSES A 1/2 INCH SIEVE AND NOT MORE THAN 15% WILL PASS A #200 SIEVE. BLANKET MAY BE COMPLETED WITH CRUSHED STONE AND/OR REINFORCED CONCRETE PIPE PROVIDED THAT NO STONE LARGER THAN 2" IS IN CONTACT WITH THE PIPE.
- SUITABLE MATERIAL: IN ROADS, ROAD SHOULDERS, WALKWAYS AND TRAVELED WAYS, SUITABLE MATERIAL FOR TRENCH BACKFILL SHALL BE NATURAL MATERIAL EXCAVATED DURING THE COURSE OF CONSTRUCTION, BUT SHALL EXCLUDE DEBRIS, PIECES OF PAVEMENT, ORGANIC MATTER, TOPSOIL, ALL WET OR SOFT MUCK, PEAT OR CLAY, ALL EXCAVATED LEDGE MATERIAL, AND ALL ROCKS OVER SIX INCHES, IN LARGE SIZE OR ANY MATERIAL WHICH AS DETERMINED BY THE ENGINEER, WILL NOT PROVIDE SUFFICIENT SUPPORT TO MAINTAIN THE COMPLETED CONSTRUCTION. SUITABLE MATERIAL SHALL BE AS DESCRIBED ABOVE, EXCEPT THAT THE ENGINEER MAY PERMIT THE USE OF TOP-SOIL, LOAM, MUD OR FEAT. IF HE IS SATISFIED THAT THE COMPLETED CONSTRUCTION WILL BE ENTIRELY STABLE AND PROVIDED THAT EASY ACCESS TO THE SEWER FOR MAINTENANCE (AND POSSIBLY RECONSTRUCTION, WHEN NECESSARY) WILL BE PRESERVED.
- BASE COURSE: IF ORDERED BY THE ENGINEER, SHALL MEET THE REQUIREMENTS OF DIVISION 300 OF THE LATEST EDITION OF THE STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION OF THE STATE OF N.H. DEPT. OF TRANSPORTATION.
- WOOD SHEETING: IF REQUIRED, IS PLACED ALONGSIDE THE PIPE AND EXTENDS BELOW MID-DIAMETER. IT SHALL BE CUT OFF TO LEAVE AN ELEVATION NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE. WHERE THE SHEETING IS ORDERED BY THE ENGINEER TO BE LEFT IN PLACE, IT SHALL BE CUT OFF AT LEAST 3 FEET BELOW FINISH GRADE, BUT NOT LESS THAN 1 FOOT ABOVE THE TOP OF THE PIPE.
- W = MAXIMUM ALLOWABLE TRENCH WIDTH TO A PLANE 12 INCHES ABOVE THE PIPE. FOR PIPES 16 INCHES NOMINAL DIAMETER OR LESS, W SHALL BE NO MORE THAN 36 INCHES. FOR PIPES GREATER THAN 16 INCHES NOMINAL DIAMETER, W SHALL BE 24 INCHES PLUS 0.5 D.O.D. W SHALL ALSO BE THE PAYMENT WIDTH FOR LEDGE EXCAVATION AND FOR ORDERED EXCAVATION BELOW GRADE.
- FOR CROSS COUNTRY CONSTRUCTION, BACKFILL OR FILL SHALL BE MOULDED TO A HEIGHT OF 8 INCHES ABOVE THE ORIGINAL GROUND SURFACE.
- CONCRETE: FOR ENCASUREMENT SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (8000) CONCRETE OF THE N.H. DEPT. OF TRANSPORTATION STANDARD SPECIFICATIONS AS FOLLOWS:
CEMENT: 8.0 BAGS PER CUBIC YARD
WATER: 6.25 GALLONS PER BAG OF CEMENT
MAXIMUM AGGREGATE SIZE: 1 INCH
NOTE: ANY SEWER PIPE TO BE ENCASED MUST BE MADE OF DUCTILE IRON.
- INSTALL TWO INCH THICK DOW STYROFOAM™ BRAND HIG DENS 40 (OR EQUAL) RIGID FOAM INSULATION WHERE LESS THAN FOUR (4) FEET OF COVER IS PROVIDED ON CROSS COUNTRY SEWER AND/OR LESS THAN SIX (6) FEET OF COVER IS PROVIDED UNDER PAVED AREAS.

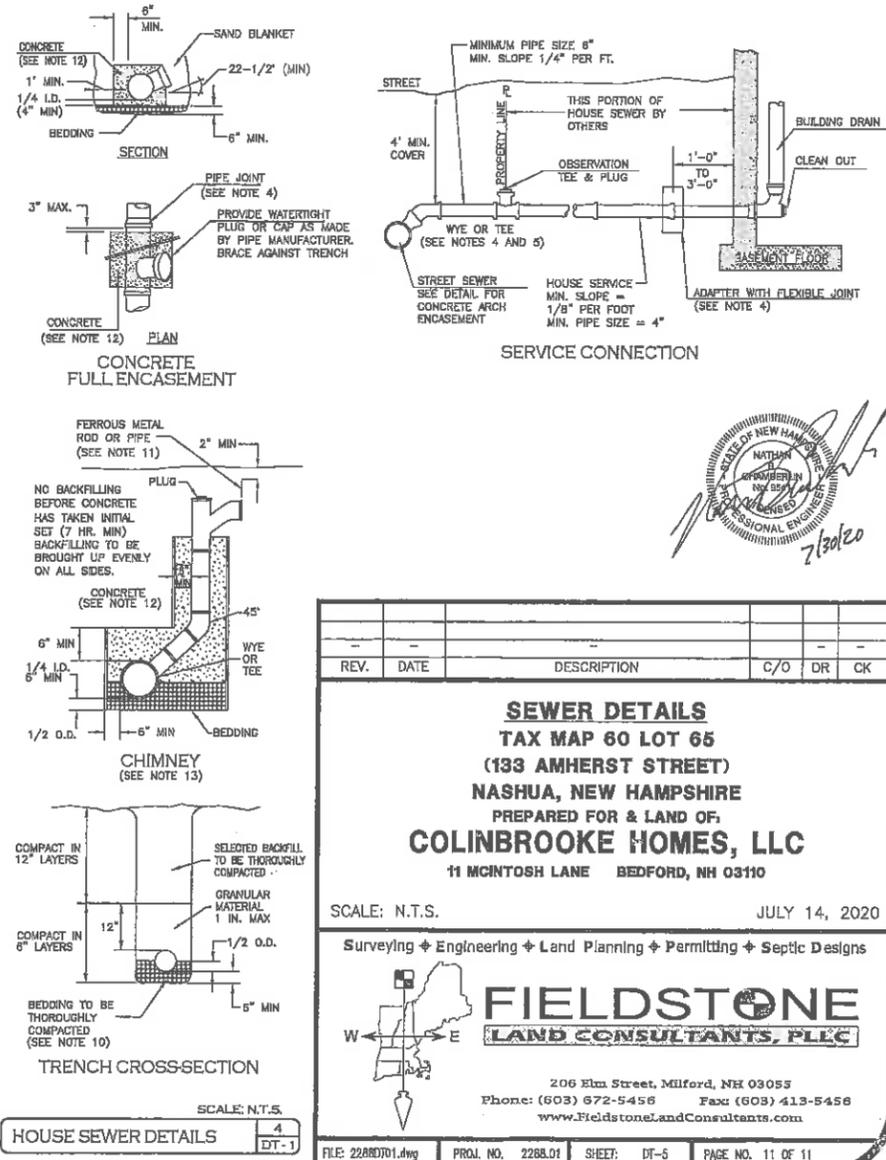


NOTES:

- MINIMUM PIPE SIZE FOR HOUSE SERVICE SHALL BE 4 INCHES.
- PIPE AND FITTINGS MATERIALS:
 - A. PLASTIC SEWER PIPE:
 - 1. PIPE AND FITTINGS SHALL CONFORM TO THE FOLLOWING ASTM STANDARDS:

| ASTM STANDARD | MATERIAL | APPROVAL |
|---------------|---------------------------|-------------------------------|
| D2024 | PVC (SOLID WALL) | 8" THROUGH 16" (SDR 35) |
| F778 | PVC (SOLID WALL) | 18" THROUGH 30" (1" & 2") |
| F794 | PVC (ROBBER WALL) | 4" THROUGH 18" (1" TO 1-3/4") |
| D2688 | ABS (COMPOSITE WALL) | 8" THROUGH 36" |
| | ABS (POLY VINYL CHLORIDE) | 8" THROUGH 16" |

 *ABS: ACRYLONITRILE-BUTADIENE-STYRENE
 - 2. JOINTS SHALL BE OF THE MECHANICAL OR PUSH-ON TYPE. JOINTS AND GASKETS SHALL CONFORM TO:
 - A21.10 DUCTILE IRON PIPE, CENTRIFUGALLY CAST IN METAL MOLDS OR SAND-LINED MOLDS FOR WATER OR OTHER LIQUIDS.
 - A21.11 RUBBER GASKETS JOINTS FOR CAST IRON PRESSURE PIPE AND FITTINGS.
3. DAMAGED PIPE SHALL BE REJECTED AND REMOVED FROM THE JOB SITE. JOINTS SHALL BE DEPENDENT UPON A NEOPRENE OR ELASTOMERIC GASKET FOR WATER TIGHTNESS. ALL JOINTS SHALL BE PROPERLY MATCHED WITH THE PIPE MATERIALS USED. WHERE DIFFERING MATERIALS ARE TO BE CONNECTED, AS AT THE STREET SEWER "Y" OR AT THE FOUNDATION WALL, APPROPRIATE ADAPTERS SHALL BE USED.
4. "Y" AND "T" WHERE A "Y" OR "T" IS NOT AVAILABLE IN THE EXISTING STREET SEWER, AN APPROPRIATE CONNECTION SHALL BE MADE IN THE SEWER, FOLLOWING MANUFACTURER'S INSTRUCTIONS USING A BOLTED, CLAMPED, OR EPOXY CEMENTED SADDLE TAPPED INTO A SMOOTHY DRILLED OR BAWN OPENING. THE PRACTICE OF BREAKING AN OPENING WITH A SLIDING HAMMER, STUFFING CLOTH OR OTHER SUCH MATERIAL AROUND THE JOINT OR APPLYING MORTAR TO HOLD THE CONNECTION AND ANY OTHER SIMILAR CRUDE PRACTICES OR NEPT OR HASTY MATERIALS WILL NOT BE PERMITTED. THE CONNECTION SHALL BE CONCRETE ENCASED, AS SHOWN IN THE DETAIL, UP TO AND INCLUDING 15" DIAMETER.
5. HOUSE SEWER INSTALLATION: THE PIPE SHALL BE HANDLED, PLACED AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE OR SAND, AS SPECIFIED IN NOTE 10, BEDDING AND RE-FILL FOR A DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH APPROPRIATE MECHANICAL DEVICES. THE PIPE SHALL BE LAID AT A CONTINUOUS AND CONSTANT GRADE FROM THE STREET SEWER CONNECTION TO THE HOUSE FOUNDATION AT A GRADE OF NOT LESS THAN 1/4 INCH PER FOOT. PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO DRY THE TRENCH.
6. TESTING THE COMPLETED HOUSE SEWER SHALL BE SUBJECT TO A LEAKAGE TEST IN ANY OF THE FOLLOWING MANNERS (PRIOR TO BACKFILLING):
 - A. AN OBSERVATION "Y" SHALL BE INSTALLED AS SHOWN. WHEN READY TESTING, AN INFLATABLE BLADDER OR PLUG SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE "Y". AFTER INFLATION WATER SHALL BE INTRODUCED INTO THE SYSTEM ABOVE THE PLUG TO A HEIGHT OF 5 FEET ABOVE THE LEVEL OF THE PLUG.
 - B. THE PIPE SHALL BE LEFT EXPOSED AND LIBERALLY HOSED WITH WATER TO SIMULATE, AS NEARLY AS POSSIBLE, WET TRENCH CONDITIONS. IF THE TRENCH IS WET, THE GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. OBSERVATION FOR LEAKS SHALL BE MADE IN THE FIRST MANHOLE DOWNSTREAM. LEAKAGE IS OBSERVED IN ANY OF THE ABOVE, ALTERNATE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG UP, IF NECESSARY, AND RE-LAID SO AS TO ASSURE WATER TIGHTNESS.
 - C. IF EQUAL CONNECTIONS NOTHING BUT SANITARY WASTE LOW FROM THE HOUSE TOILETS SINKS, LAUNDRY, ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS, SLUMP PUMPS OR ANY OTHER SIMILAR CONNECTION CARRYING RAIN WATER, DRAINAGE OR GROUND WATER SHALL NOT BE PERMITTED.
7. HOUSE WATER SERVICE SHALL NOT BE LAID IN THE SAME TRENCH AS THE SEWER SERVICE.
8. BEDDING: SCREENED GRAVEL AND/OR CRUSHED STONE FREE FROM CLAY, LOAM, ORGANIC MATTER AND MEETING ASTM C33-67, 100% PASSING 1 INCH SCREEN, 90-100% PASSING 3/8 INCH SCREEN, 20-50% PASSING 3/16 INCH SCREEN, 0-10% PASSING #4 SIEVE, 0-5% PASSING #8 SIEVE. WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, SCREENED GRAVEL OR CRUSHED STONE (1-1/2 TO 1/2 INCH) SHALL BE USED.
9. LOCATE THE LOCATION OF THE "Y" OR "T" SHALL BE RECORDED AND FILED IN THE MUNICIPAL RECORDS. IN ADDITION, A FERROUS METAL ROD OR PIPE SHALL BE PLACED OVER THE "Y" OR "T", AS DESCRIBED IN THE TYPICAL "CHIMNEY" DETAIL, TO AID IN LOCATING THE BURIED PIPE OR "Y".
10. CONCRETE ENCASUREMENT SHALL CONFORM TO THE REQUIREMENTS FOR CLASS A (8000) PB CONCRETE OF THE N.H. DEPT. OF TRANSPORTATION STANDARD SPECIFICATIONS AS FOLLOWS:
CEMENT: 8.0 BAGS PER CUBIC YARD
WATER: 6.25 GALLONS PER BAG OF CEMENT
AGGREGATE: 1 INCH MAX
11. CHIMNEYS: IF VERTICAL DROP INTO THE SEWER IS GREATER THAN 4 FEET, A CHIMNEY SHALL BE CONSTRUCTED FOR THE HOUSE CONNECTION. CHIMNEY INSTALLATION AS RECOMMENDED BY THE PIPE MANUFACTURER MAY BE USED IF APPROVED BY THE ENGINEER.



SEWER DETAILS
 TAX MAP 60 LOT 65
 (133 AMHERST STREET)
 NASHUA, NEW HAMPSHIRE
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SCALE: N.T.S. JULY 14, 2020

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NASHUA CITY PLANNING BOARD
STAFF REPORT

TO: Nashua City Planning Board
FROM: Linda McGhee, Deputy Planning Manager
FOR: September 24, 2020
RE: **New Business #9 - Site Plan**

I. Project Statistics:

Owner: Tupney, Hurd, Clegg, LLC
Proposal: Site plan to construct two duplexes
Location: 25 Ingalls Street
Total Site Area: 0.424 acres (18,494.5 sf)
Existing Zoning: RC-Urban Residence
Surrounding Uses: Residential

II. Background Information:

On September 13, 2018 the planning board approved a four lot subdivision and this lot was created. Prior to recording the subdivision, the applicant made a voluntary contribution in the amount of \$9,731.50 in lieu of sidewalk construction. The approval letter and staff report are attached.

III. Project Description:

The proposal is to construct two duplex style condominium residences comprising of four residential units. All zoning regulations are met. The duplexes would be serviced by a common driveway and private parking. The development will be serviced by municipal sewer and Pennichuck Water. Two waivers are being requested for this project. The first is from the requirement to provide underground utilities and the second waiver is to show existing condition on abutting parcels.

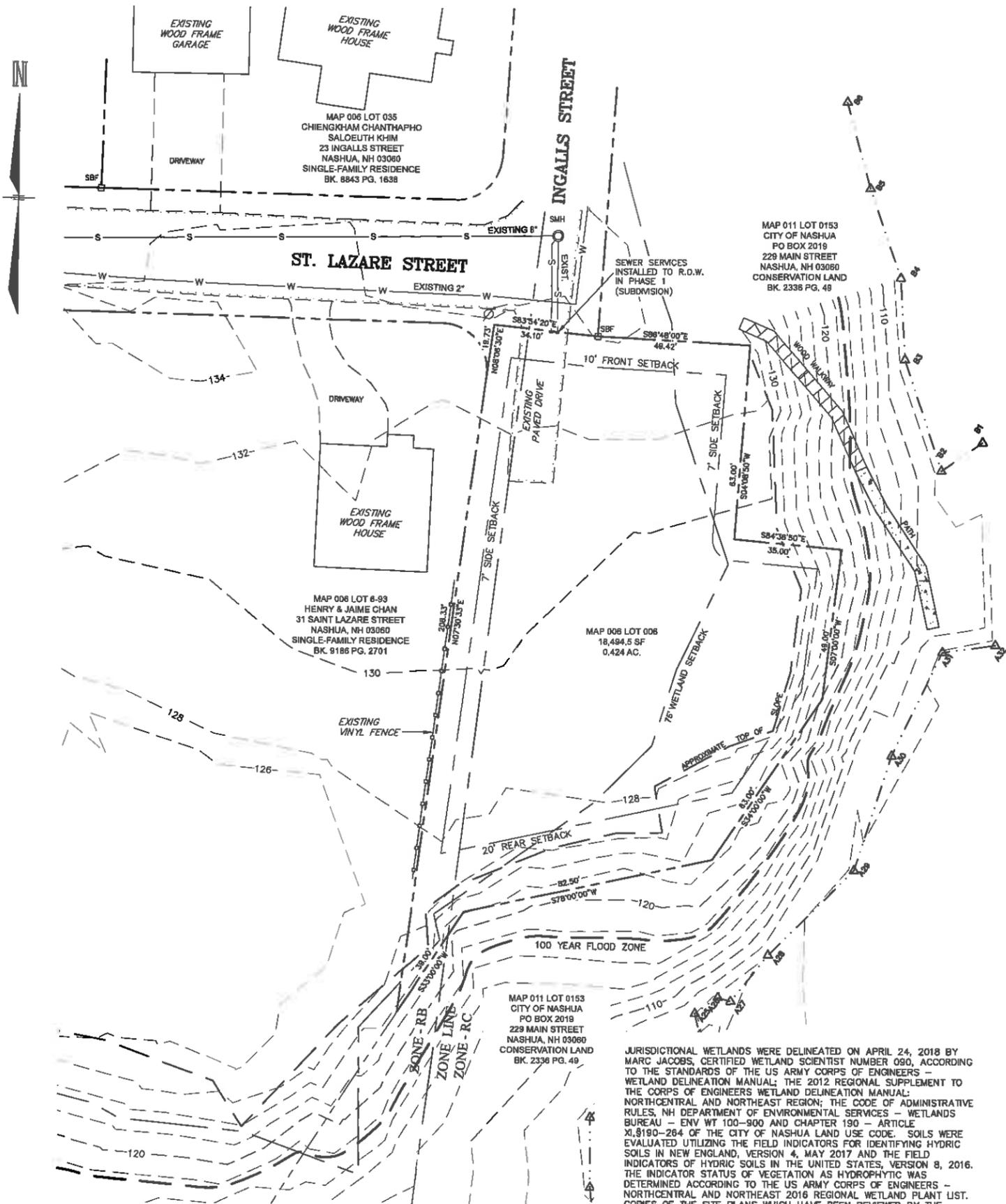
The applicant's engineer has submitted a drainage report and indicates that the calculations show a decrease in peak runoff flows in each storm event in accordance with city regulations and this development will have no effective change to the existing drainage patterns

City staff reviewed the plans; comments are attached.

IV. Staff Recommendations and Findings:

The Planning Board should make a determination that the plan meets, or does not meet, the requirements outlined in the Site Plan NRO § 190-146(D). The Board should review these prior to making a motion. If the Planning Board chooses to disapprove the plan, specific reasons should be given. If the Planning Board chooses to approve this plan, staff recommends the following stipulations be made part of that approval:

1. The request for a waiver of NRO § 190-221, which requires underground utilities, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
2. The request for a waiver of NRO § 190-279(EE), to show existing condition on adjacent lots, **is/is not** granted, finding that the waiver **will/will not** be contrary to the spirit and intent of the regulation.
3. Prior to the Chair signing the plan, all comments in an e-mail from Joseph Mendola, Street Construction Engineer, dated _____ shall be addressed to the satisfaction of the Engineering Department.
4. Prior to the Chair signing the plan, all conditions from the Planning Board approval letter will be added to the cover page of the final mylar and paper copies submitted to the City.
5. Prior to the Chair signing the plan, minor drafting corrections will be made.
6. Prior to any work on site, a pre-construction meeting shall be held and a financial guarantee shall be approved.
7. Prior to the issuance of a building permit, the applicant shall provide documents establishing a homeowners or condominium association, which will be responsible for maintaining all property in common ownership. The documents shall be submitted to the Planning Department and Corporation Counsel for review.
8. Prior to the issuance of a building permit, the electronic file of the plan will be submitted to the City of Nashua.
9. Prior to the issuance of a building permit, stormwater documents will be submitted to City staff for review and recorded at the applicant's expense.
10. Prior to issuance of the final certificate of occupancy for the development, an as-built plan locating all driveways, units, other buildings, utilities and site landscaping shall be completed by a professional engineer and submitted to the Planning Department. The as-built plan shall include a statement that all construction was generally completed in accordance with the approved site plan and applicable local regulations.
11. Prior to the issuance of the last Certificate of Occupancy, all site improvements will be completed.

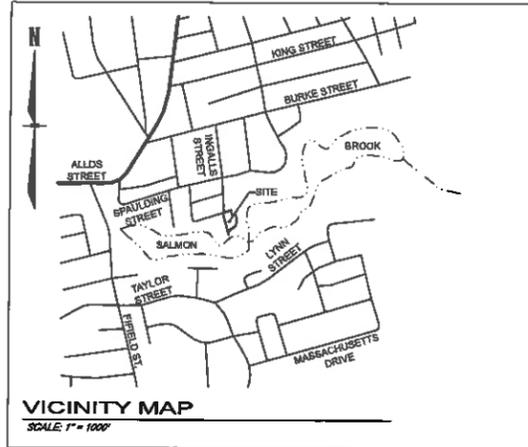


REFERENCE PLANS:

1. A PLAN TITLED "SUBDIVISION PLAN, SAINT LAZARE STREET, NASHUA, NH" BY MJ GRAINGER ENGINEERING, INC., PREPARED FOR TUMPNEY, HURD, CLEGG, LLC DATED JUNE 2018 AND RECORDED AT HCRD AS PLAN No 39956.

NOTES:

1. THE PURPOSE OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS OF TAX MAP 006, LOT 006.
2. OWNER OF RECORD: TUMPNEY, HURD, CLEGG, LLC 39 TRIGATE ROAD NASHUA, NH 03051
3. DEED REFERENCE TO PROPERTY IS BOOK 8064, PAGE 0644 R.C.R.D.
4. TOTAL PROPERTY AREA IS 18,494.5 SF = 0.424 ACRES
5. PROPERTY IS CURRENTLY ZONED: RC URBAN RESIDENCE
6. ZONING REQUIREMENTS:
 MIN. FRONTAGE: 50 feet
 FRONT SETBACK: 10 feet
 SIDE SETBACK: 7 feet
 REAR SETBACK: 20 feet
7. BOUNDARY SHOWN HEREON TAKEN FROM PLAN REFERENCE 1. EXISTING CONDITIONS AND TOPOGRAPHY FROM A GROUND SURVEY PERFORMED BY MJ GRAINGER ENGINEERING, INC.
8. THERE ARE NO WETLANDS ON THIS PROPERTY. WETLANDS SHOWN ON THE ADJACENT PROPERTIES TAKEN FROM PLAN REFERENCE 1.
9. THIS PROPERTY IS NOT WITHIN THE 100 YEAR FLOOD HAZARD ZONE.
10. DATUM: NGVD 1929 MEAN SEA LEVEL
 BENCHMARK: NHHD DISC STAMPED "315 0480" HARBOR AVENUE AT ALLDS STREET.
 ELEVATION: 130.01 (MINUS 90.4 TO NASHUA CITY DATUM)



LEGEND

| | | | |
|-------------------------|-------|-----------------------------------|-------|
| EXISTING STONEMALL | ----- | WETLANDS | ----- |
| ABUTTERS PROPERTY LINES | ----- | DRILL HOLE FOUND | ○ |
| SUBJECT PROPERTY LINES | ----- | REBAR W/ CAP FOUND | ○ |
| PROPOSED PROPERTY LINES | ----- | STONE BOUND FOUND | □ |
| PROPERTY TIE LINE | ----- | 5/8" REBAR TO BE SET | ● |
| EDGE OF PAVEMENT | ----- | 4"x4"x36" GRANITE BOUND TO BE SET | ■ |
| EXISTING TREELINE | ----- | PROPOSED WELL | ⊙ |
| EXISTING CONTOUR (MNR) | 572 | | |
| EXISTING CONTOUR (MJR) | -570 | | |
| EXISTING BLDG SETBACK | ----- | | |

THE UNDER-SIGNED DOES HEREBY AGREE TO PERFORM ALL IMPROVEMENTS AS SHOWN ON THIS PLAN AND AS CONDITIONED OR STIPULATED BY THE NASHUA CITY PLANNING BOARD. ALL REQUIRED SITE IMPROVEMENTS MUST BE COMPLETED OR GUARANTEED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY

OWNER
 TUMPNEY, HURD, CLEGG, LLC
 39 TRIGATE ROAD
 HUDSON, NH 03051
 (603) 718-2932

DATE

SHEET INDEX

| SHT. NO. | DESCRIPTION |
|----------|--------------------------|
| 1 OF 7 | EXISTING CONDITIONS PLAN |
| 2 OF 7 | SITE PLAN |
| 3 OF 7 | GRADING & DRAINAGE PLAN |
| 4 OF 7 | LANDSCAPE PLAN |
| 5 OF 7 | CONSTRUCTION DETAILS |
| 6 OF 7 | CONSTRUCTION DETAILS |
| 7 OF 7 | EROSION CONTROL NOTES |

SEPTEMBER 15, 2020
 LATEST PLAN SET REVISION DATE

APPROVED
NASHUA CITY PLANNING BOARD

| | |
|-----------|------|
| CHAIRMAN | DATE |
| SECRETARY | DATE |

EXISTING CONDITIONS PLAN
 MAP 006, LOT 006
 25 INGALLS STREET,
 NASHUA, NEW HAMPSHIRE

PREPARED FOR:
TUMPNEY, HURD, CLEGG, LLC
 39 TRIGATE ROAD
 HUDSON, NH 03051

FEBRUARY 19, 2020 SCALE: 1"=20'

ENGINEER:
RJB ENGINEERING, LLC
 2 GLENDALE ROAD
 CONCORD, NH 03301
 P.H. 603-219-0194

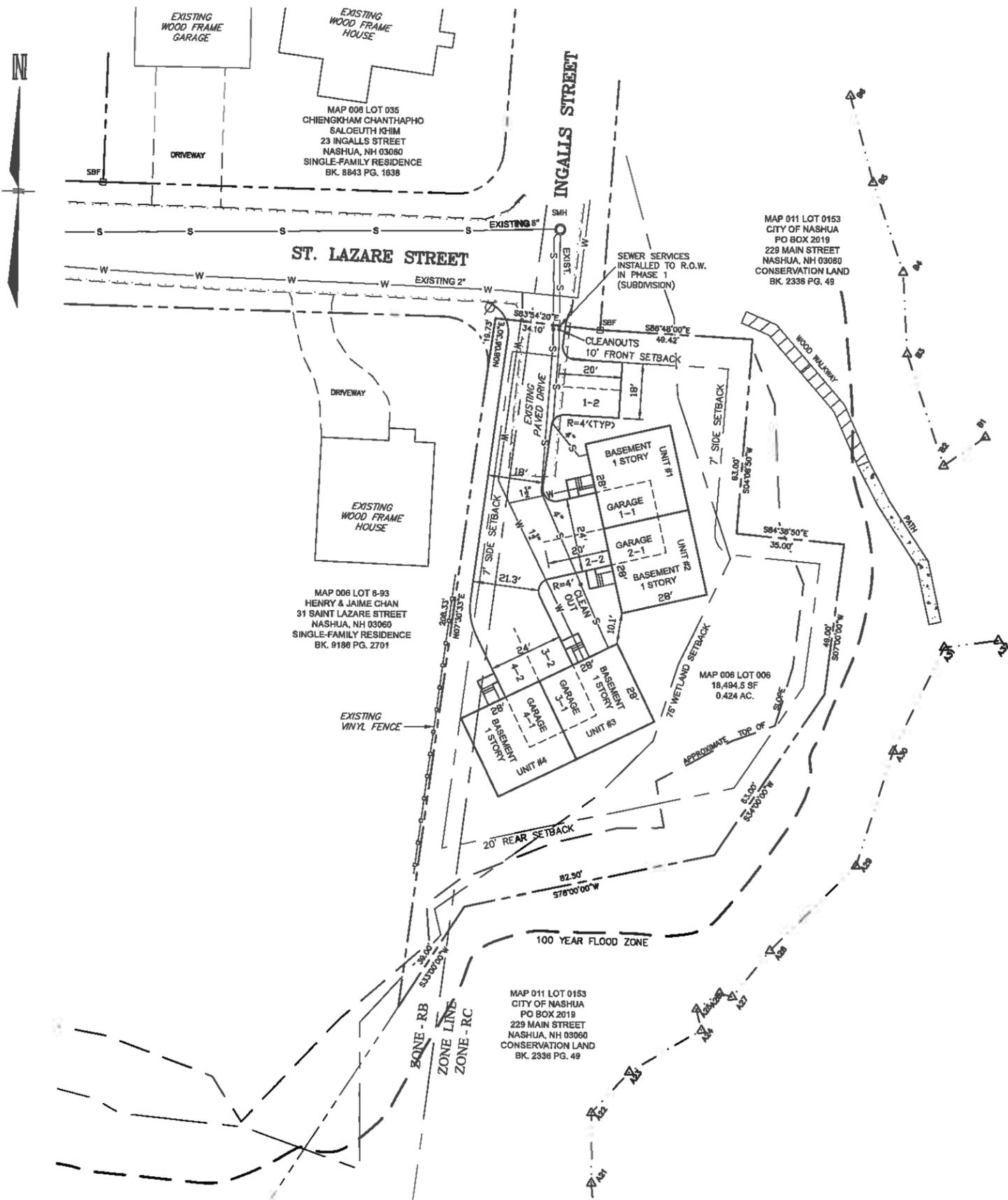


ENGINEER & SURVEYOR:
M.J. GRAINGER ENGINEERING, INC.
 PROFESSIONAL ENGINEERS - SURVEYORS - PLANNERS
 220 DERRY ROAD HUDSON, NH 03051 (603) 882-4359

JURISDICTIONAL WETLANDS WERE DELINEATED ON APRIL 24, 2018 BY MARC JACOBS, CERTIFIED WETLAND SCIENTIST NUMBER 090, ACCORDING TO THE STANDARDS OF THE US ARMY CORPS OF ENGINEERS - WETLAND DELINEATION MANUAL; THE 2012 REGIONAL SUPPLEMENT TO THE CORPS OF ENGINEERS WETLAND DELINEATION MANUAL; NORTH-CENTRAL AND NORTHEAST REGION; THE CODE OF ADMINISTRATIVE RULES, NH DEPARTMENT OF ENVIRONMENTAL SERVICES - WETLANDS BUREAU - ENV WT 100-900 AND CHAPTER 190 - ARTICLE XI, §190-284 OF THE CITY OF NASHUA LAND USE CODE. SOILS WERE EVALUATED UTILIZING THE FIELD INDICATORS FOR IDENTIFYING HYDRIC SOILS IN NEW ENGLAND, VERSION 4, MAY 2017 AND THE FIELD INDICATORS OF HYDRIC SOILS IN THE UNITED STATES, VERSION 8, 2016. THE INDICATOR STATUS OF VEGETATION AS HYDROPHYTIC WAS DETERMINED ACCORDING TO THE US ARMY CORPS OF ENGINEERS - NORTH-CENTRAL AND NORTHEAST 2016 REGIONAL WETLAND PLANT LIST. COPIES OF THE SITE PLANS WHICH HAVE BEEN REVIEWED BY THE WETLAND SCIENTIST ARE INDIVIDUALLY STAMPED, SIGNED, AND DATED. THIS NOTE HAS BEEN CUSTOMIZED FOR THIS PROJECT.

I CERTIFY THAT THIS PLAN WAS PREPARED FROM THE BOUNDARY INFORMATION SHOWN ON THE PLANS REFERENCED AND A FIELD SURVEY MADE ON THE GROUND DURING APRIL AND MAY 2018, IN ACCORDANCE WITH CITY REGULATIONS.

| No. | DESCRIPTION | DATE |
|-----|------------------------|-----------|
| 1. | REVISE PER CITY REVIEW | 8/25/2020 |
| | | |
| | | |

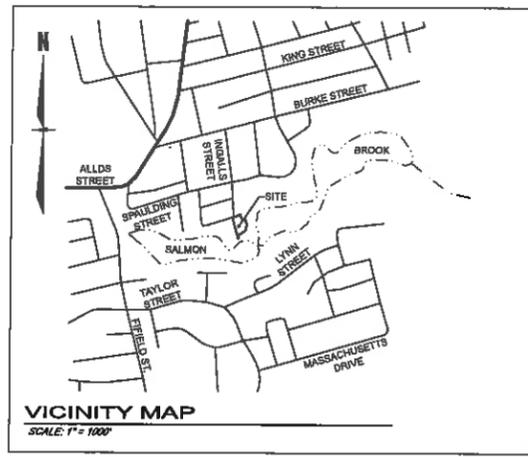


REFERENCE PLANS:

1. A PLAN TITLED "SUBDIVISION PLAN, SAINT LAZARE STREET, NASHUA, NH" BY M.J. GRAINGER ENGINEERING, INC., PREPARED FOR TUMPNEY, HURD, CLEGG, LLC DATED JUNE 2018 AND RECORDED AT HCRD AS PLAN No 39956.

NOTES:

- THE PURPOSE OF THIS PLAN IS TO SHOW FOUR SINGLE-FAMILY CONDOMINIUM UNITS, ACCESS, PARKING, UTILITIES, LANDSCAPING, AND ASSOCIATED IMPROVEMENTS.
- OWNER OF RECORD:
TUMPNEY, HURD, CLEGG, LLC
39 TRIGATE ROAD
NASHUA, NH 03051
- DEED REFERENCE TO PROPERTY IS BOOK 9064, PAGE 0644 R.C.R.D.
- TOTAL PROPERTY AREA IS 18,494.5 SF = 0.424 ACRES
- PROPERTY IS CURRENTLY ZONED: RC URBAN RESIDENCE
- ZONING REQUIREMENTS:
FOR R-C ZONE
MIN. AREA: 5,000 sf. 18,494.5 sf.
MIN. LOT WIDTH: 50 feet 56 feet
MIN. FRONTAGE: 50 feet 53.83 feet
MIN. LOT DEPTH: 75 feet 180 feet
FRONT SETBACK: 10 feet 29.4 feet
SIDE SETBACK: 7 feet 7.0 feet
REAR SETBACK: 20 feet 32.7 feet
MAX BLDG. HEIGHT: 100 feet 30 feet
MIN. BLDG STORIES: 10 2
MIN. OPEN SPACE: 35% 64.3%
- BOUNDARY SHOWN HEREON TAKEN FROM PLAN REFERENCE 1. EXISTING CONDITIONS AND TOPOGRAPHY FROM A GROUND SURVEY PERFORMED BY M.J. GRAINGER ENGINEERING, INC.
- THERE ARE NO WETLANDS ON THIS PROPERTY. WETLANDS SHOWN ON THE ADJACENT PROPERTIES TAKEN FROM PLAN REFERENCE 1.
- THIS PROPERTY IS NOT WITHIN THE 100 YEAR FLOOD HAZARD ZONE. FLOOD ZONE SHOWN ON ADJACENT PROPERTIES.
- SITE TO BE SERVED BY MUNICIPAL SEWER AND PENNICHUCK WATER WORKS.
- ALLOWABLE DENSITY IS 12.5 UNITS PER ACRE= 0.424 x 12.5= 5.3
PROPOSED NUMBER OF UNITS= 4
- PARKING REQUIRED= 2 SPACES PER UNIT= 4 x 2= 8 SPACES RQD.
PARKING PROVIDED= 9 SPACES
- IT SHALL BE UNLAWFUL TO MODIFY, CHANGE, OR ALTER ANY STRUCTURE SHOWN ON THIS PLAN IN ANY WAY WHATSOEVER, OR CONVERT OR ALTER ANY STRUCTURE SHOWN ON THIS PLAN, OR CHANGE THE ABOVE USE INDICATED ON THE PLAN WITHOUT RECEIVING APPROVAL FROM THE CITY.
- ALL STREET RESTORATION SHALL BE IN ACCORDANCE WITH NRO SECTION 285-13. ALL WORK IN THE R.O.W. SHALL BE COMPLETED TO THE SATISFACTION OF THE PUBLIC WORKS DEPARTMENT (NO NEW R.O.W. PROPOSED).
- PRIOR TO ANY WORK BEING CONDUCTED A PRE-CONSTRUCTION CONFERENCE SHALL BE HELD WITH THE CITY PLANNING STAFF AND OTHER CITY DEPARTMENTS AS NECESSARY TO REVIEW THE WORK PROPOSED.
- ALL PIPE WORK WITHIN THE CITY'S R.O.W. SHALL BE PERFORMED BY A LICENSED CITY OF NASHUA DRAIN LAYER.
- EROSION CONTROL MEASURES (SILT FENCE) SHALL BE INSTALLED ALONG THE DOWN GRADIENT SLOPES PRIOR TO THE START OF ANY WORK AND SHALL BE MAINTAINED BY THE DEVELOPER UNTIL VEGETATION HAS BEEN ESTABLISHED.
- ALL LANDSCAPING SHALL BE AS SHOWN ON THE PLAN AND CONFORM TO THE APPLICABLE CITY OF NASHUA ZONING REGULATIONS.
- ALL SITE LIGHTING SHALL BE AS SHOWN ON THE PLAN, DIRECTED ONTO THE SITE AND CONFORM TO THE APPLICABLE CITY OF NASHUA ZONING REGULATIONS.
- FUTURE BUILDING CONSTRUCTION SHALL INCORPORATE FOUNDATION DRAINAGE SYSTEMS EXCEPT WHERE AN INVESTIGATION ESTABLISHES THAT SPECIFIC BUILDING SITES ARE LOCATED IN WELL DRAINED SOILS AND THAT SUCH SYSTEMS ARE NOT REQUIRED.



LEGEND

| | | | |
|--------------------------|------|-----------------------------------|-----|
| EXISTING STONEWALL | --- | WETLANDS | --- |
| ADJUTERS PROPERTY LINES | --- | DRILL HOLE FOUND | ⊙ |
| SUBJECT PROPERTY LINES | --- | REBAR W/ CAP FOUND | ○ |
| PROPOSED PROPERTY LINES | --- | STONE BOUND FOUND | □ |
| PROPERTY TIE LINE | --- | 5/8" REBAR TO BE SET | ● |
| EDGE OF PAVEMENT | --- | 4"x4"x36" GRANITE BOUND TO BE SET | ■ |
| EXISTING TREELINE | --- | PROPOSED WELL | ⊙ |
| EXISTING CONTOUR (MNR) | 572 | | |
| EXISTING CONTOUR (M.J.R) | -570 | | |
| EXISTING BLDG SETBACK | --- | | |

THE UNDER-SIGNED DOES HEREBY AGREE TO PERFORM ALL IMPROVEMENTS AS SHOWN ON THIS PLAN AND AS CONDITIONED OR STIPULATED BY THE NASHUA CITY PLANNING BOARD. ALL REQUIRED SITE IMPROVEMENTS MUST BE COMPLETED OR GUARANTEED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY

OWNER
TUMPNEY, HURD, CLEGG, LLC
39 TRIGATE ROAD
HUDSON, NH 03051
(603) 718-2932

DATE _____

APPROVED
NASHUA CITY PLANNING BOARD

CHAIRMAN _____ DATE _____

SECRETARY _____ DATE _____

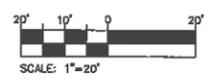
SITE PLAN
MAP 006, LOT 006
25 INGALLS STREET,
NASHUA, NEW HAMPSHIRE

PREPARED FOR:
TUMPNEY, HURD, CLEGG, LLC
39 TRIGATE ROAD
HUDSON, NH 03051

FEBRUARY 19, 2020

SCALE: 1"=20'

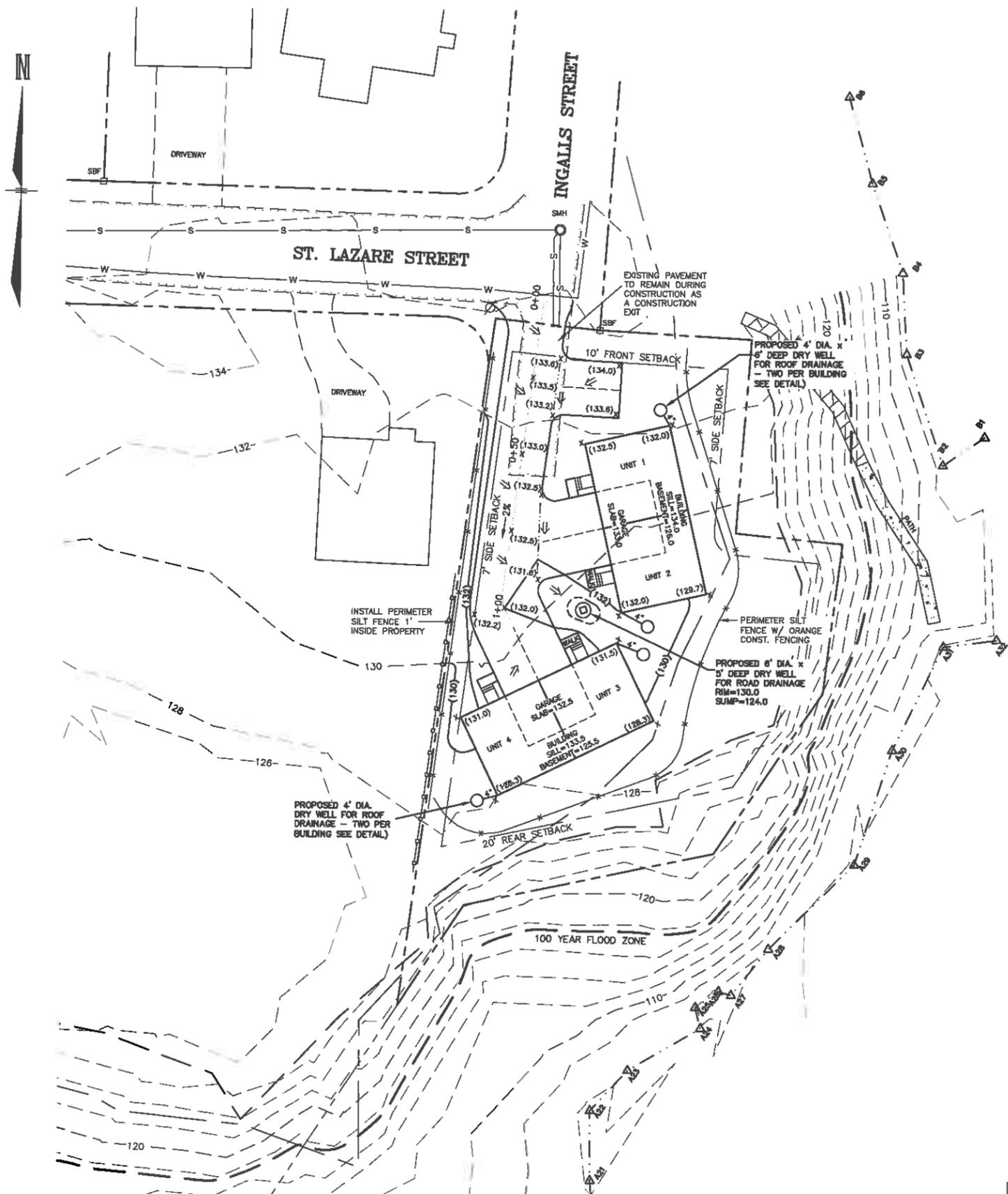
ENGINEER:
RJB ENGINEERING, LLC
2 GLENDALE ROAD
CONCORD, NH 03301
PH. 603-219-0194



ENGINEER & SURVEYOR:
M.J. GRAINGER ENGINEERING, INC.
PROFESSIONAL ENGINEERS - SURVEYORS - PLANNERS
220 DERRY ROAD HUDSON, NH 03051 (603) 882-4359

I CERTIFY THAT THIS PLAN WAS PREPARED FROM THE BOUNDARY INFORMATION SHOWN ON THE PLANS REFERENCED AND A FIELD SURVEY MADE ON THE GROUND DURING APRIL AND MAY 2018, IN ACCORDANCE WITH CITY REGULATIONS.

| No. | DESCRIPTION | DATE |
|-----|------------------------|------------|
| 1. | REDUCE BUILDING SIZE | 05/19/2020 |
| 2. | REVISE PER CITY REVIEW | 08/25/2020 |



GENERAL NOTES

1. ALL WORK SHALL CONFORM WITH NHDOT SPECIFICATIONS OR CITY REQUIREMENTS, WHICHEVER IS MORE STRINGENT.
2. ALL IN-PAVEMENT MANHOLES (IF ANY) SHALL HAVE RIMS SET TO FINISH GRADE REGARDLESS OF ANY ELEVATIONS SHOWN.
3. THE CONTRACTOR SHALL NOTIFY DIG-SAFE TO VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION. CONTRACTOR TO NOTIFY DIG-SAFE 72 HOURS PRIOR TO COMMENCING ANY CONSTRUCTION ACTIVITIES (1-800-344-7233). THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR.
4. THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AFFECTED BY HIS WORK AT ALL TIMES.
5. ALL EXCAVATIONS SHALL BE THOROUGHLY SECURED ON A DAILY BASIS BY THE CONTRACTOR AT THE COMPLETION OF CONSTRUCTION OPERATIONS IN THE IMMEDIATE AREA.
6. EROSION CONTROL SYSTEMS SHALL BE INSTALLED AND MAINTAINED FOR THE DURATION OF THE PROJECT IN ACCORDANCE WITH APPLICABLE NHDES STANDARDS.
7. REFER TO THE CITY STANDARD DETAILS, LATEST REVISION, FOR ADDITIONAL INFORMATION AND CRITERIA.
8. THE CONTRACTOR SHALL STABILIZE ALL DITCHES, SWALES, AND PONDS PRIOR TO DIRECTING FLOW TO THEM.
9. TOTAL AREA OF DISTURBANCE IS 11,000 SF. SINCE IT IS LESS THAN ONE ACRE OF DISTURBANCE, THE CONTRACTOR IS NOT REQUIRED TO FILE A NOTICE OF INTENT (NOI) OR TO PREPARE A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) ACCORDING TO EPA REQUIREMENTS.

THE UNDER-SIGNED DOES HEREBY AGREE TO PERFORM ALL IMPROVEMENTS AS SHOWN ON THIS PLAN AND AS CONDITIONED OR STIPULATED BY THE NASHUA CITY PLANNING BOARD. ALL REQUIRED SITE IMPROVEMENTS MUST BE COMPLETED OR GUARANTEED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY

OWNER _____ DATE _____
 TUMPNEY, HURD, CLEGG, LLC
 39 TRIGATE ROAD
 HUDSON, NH 03051
 (603) 718-2932

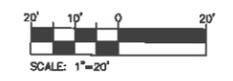
| APPROVED NASHUA CITY PLANNING BOARD | |
|--|------------|
| CHAIRMAN _____ | DATE _____ |
| SECRETARY _____ | DATE _____ |

GRADING AND DRAINAGE PLAN
 MAP 006, LOT 006
 25 INGALLS STREET,
 NASHUA, NEW HAMPSHIRE

PREPARED FOR:
 TUMPNEY, HURD, CLEGG, LLC
 39 TRIGATE ROAD
 HUDSON, NH 03051

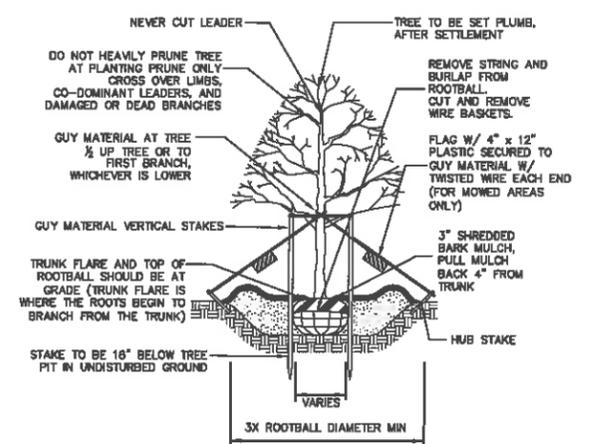
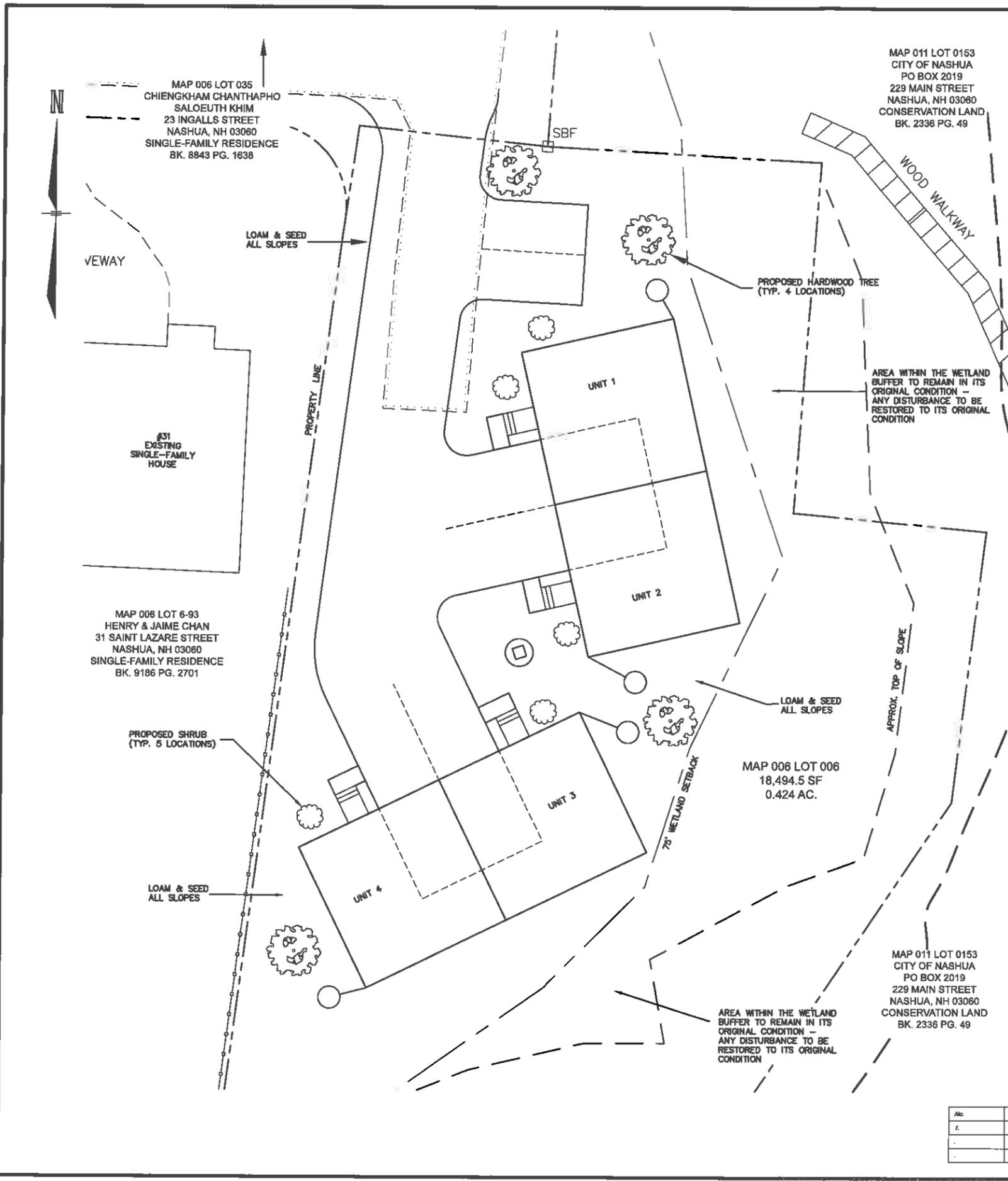
FEBRUARY 19, 2020 SCALE: 1"=20'

ENGINEER:
 RJB ENGINEERING, LLC
 2 GLENDALE ROAD
 CONCORD, NH 03301
 PH: 603-219-0194



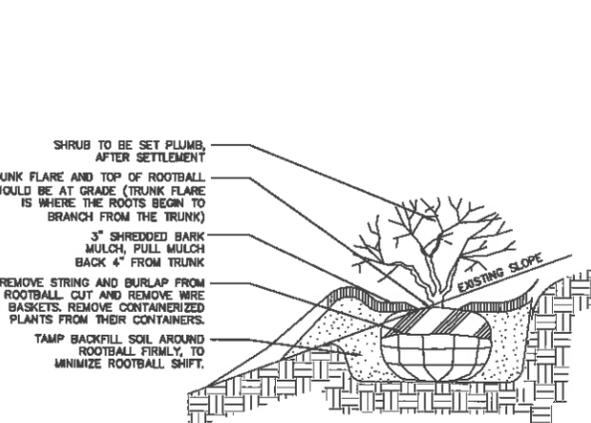
ENGINEER & SURVEYOR:
 M.J. GRAINGER ENGINEERING, INC.
 PROFESSIONAL ENGINEERS - SURVEYORS - PLANNERS
 220 DERRY ROAD HUDSON, NH 03051 (603) 882-4359

| NO. | DESCRIPTION | DATE |
|-----|--|------------|
| 1. | REVISE PER CITY REVIEW | 02/20/20 |
| 2. | INCREASE DRY WELL SIZE FOR ROAD DRAINAGE | 01/15/2020 |



- NOTES:**
1. GUYING AND STAKING TO BE DETERMINED IN THE FIELD BY THE LANDSCAPE ARCHITECT. LOCAL FIELD CONDITIONS AS WELL AS PLANT CHARACTERISTICS WILL DETERMINE THE NECESSITY OF GUYING AND STAKING.
 2. TYPICALLY ONLY TREES WITH A 3" OR GREATER CALIPER NEED TO BE STAKED. TREES WITH LESS THAN A 3" CALIPER NEED TO BE STAKED ONLY AS REQUIRED BY LANDSCAPE ARCHITECT.
 3. ONLY WRAP TREE TRUNKS AS REQUIRED BY LANDSCAPE ARCHITECT.
 4. TREE SHALL BE SET PLUMB, AFTER SETTLEMENT.
 5. LOAM FOR BACKFILLING SHALL BE AMENDED AS REQUIRED BY LANDSCAPE ARCHITECT.
 6. CITY TREES PLANTED ON PRIVATE PROPERTY, ADJACENT TO A PUBLIC RIGHT-OF-WAY, NEED TO BE PLANTED A MINIMUM OF 5 FEET FROM THE EDGE OF THE CITY SIDEWALK.

DECIDUOUS TREE PLANTING DETAIL
NOT TO SCALE



- NOTE:**
1. DO NOT HEAVILY PRUNE SHRUB AT PLANTING, PRUNE ONLY CROSSOVER LIMBS AND DAMAGED OR DEAD BRANCHES.
 2. BACKFILL WITH LOAM, AMEND AS REQUIRED BY LANDSCAPE ARCHITECT.
 3. SHRUBS & GROUNDCOVER PLANTED ADJACENT TO CITY SIDEWALKS NEED TO BE PLACED SO THE PLANTS, AT THEIR MATURE HEIGHT & WIDTH, WILL NOT ENCRDACH INTO THE CITY'S SIDEWALK.

TYPICAL SHRUB PLANTING DETAIL
NOT TO SCALE

- PLANTING NOTES:**
1. TREES AND SHRUBS SHALL NOT BE PLANTED UNTIL ALL OTHER WORK IS SUBSTANTIALLY COMPLETE TO MINIMIZE POSSIBILITY OF DAMAGE OR DISTURBANCE.
 2. ALL PLANT MATERIAL SHALL BE GUARANTEED TO BE IN GOOD, HEALTHY CONDITION FOR ONE YEAR FROM THE DATE OF PLANTING. CONTRACTOR SHALL REPLACE, WITHOUT COST TO THE OWNER, ALL DEAD AND NON-FLOURISHING PLANTS. REPLACEMENT PLANTS SHALL BE GAURANTEED IDENTICALLY TO ORIGINAL PLANTS.
 3. ALL BEDS TO MULCHED WITH 4" DEPTH SHREDDED BARK MULCH UNLESS OTHERWISE NOTED.
 4. CONTRACTOR TO PROVIDE NECESSARY TEMPORARY IRRIGATION IF NEEDED BASED ON TIME OF YEAR THE PROJECT IS IMPLEMENTED.

THE UNDER-SIGNED DOES HEREBY AGREE TO PERFORM ALL IMPROVEMENTS AS SHOWN ON THIS PLAN AND AS CONDITIONED OR STIPULATED BY THE NASHUA CITY PLANNING BOARD. ALL REQUIRED SITE IMPROVEMENTS MUST BE COMPLETED OR GUARANTEED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY

OWNER
TUMPNEY, HURD, CLEGG, LLC
39 TRIGATE ROAD
HUDSON, NH 03051
(603) 718-2932

DATE

APPROVED
NASHUA CITY PLANNING BOARD

CHAIRMAN _____ DATE _____

SECRETARY _____ DATE _____

LANDSCAPING PLAN
MAP 006, LOT 006
25 INGALLS STREET,
NASHUA, NEW HAMPSHIRE

PREPARED FOR:
TUMPNEY, HURD, CLEGG, LLC
39 TRIGATE ROAD
HUDSON, NH 03051

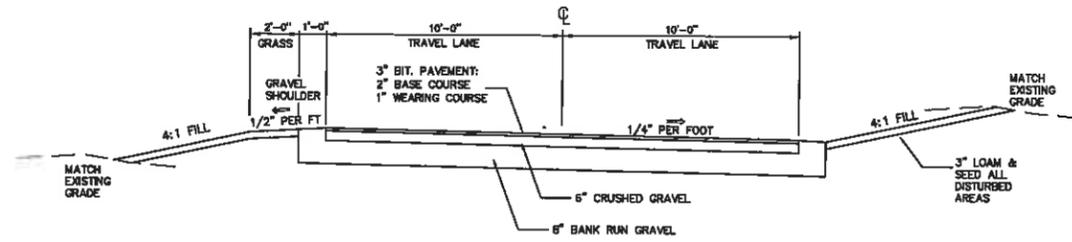
FEBRUARY 19, 2020 SCALE: 1"=10'

ENGINEER:
RJB ENGINEERING, LLC
2 GLENDALE ROAD
CONCORD, NH 03301
PH. 603-219-0194

ENGINEER & SURVEYOR:
M.J. GRAINGER ENGINEERING, INC.
PROFESSIONAL ENGINEERS - SURVEYORS - PLANNERS
220 DERRY ROAD HUDSON, NH 03051 (603) 882-4359

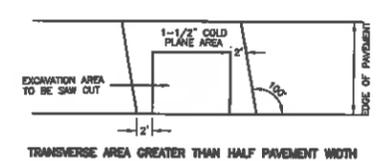
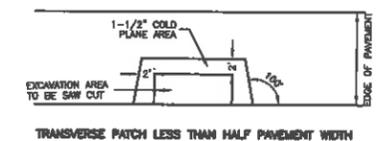


| No. | DESCRIPTION | DATE |
|-----|------------------------|----------|
| 1. | REVISE PER CITY REVIEW | 02/20/20 |
| | | |
| | | |



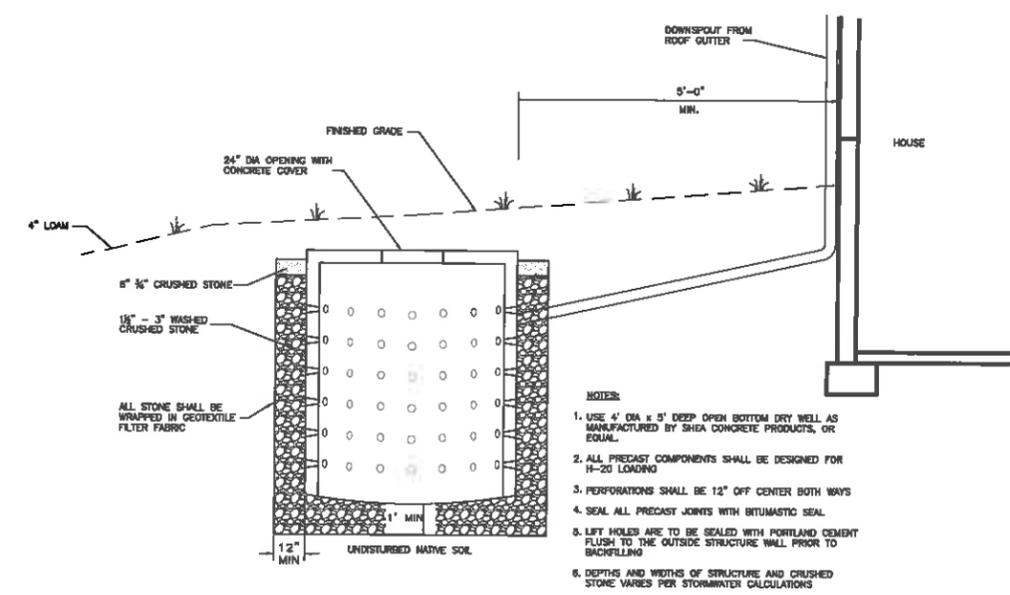
- NOTE**
1. ALL PAVEMENT, BASE MATERIALS, AND WORKMANSHIP SHALL BE IN COMPLIANCE WITH N.H.D.O.T. "STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION" LATEST EDITION
 2. ALL EMBANKMENT MATERIAL SHALL BE CLEAN WELL GRADED MATERIAL FREE FROM ROOTS, STUMPS, LOAM AND LEDGE / ROCK HAVING D50 NO GREATER THAN 12"
 3. PROVIDE 4" MINIMUM "TRACKED" LOAMED, SEED, AND MULCH ON ALL SLOPE GRADING, UNLESS OTHERWISE NOTED.

TYPICAL ROADWAY SECTION
NOT TO SCALE



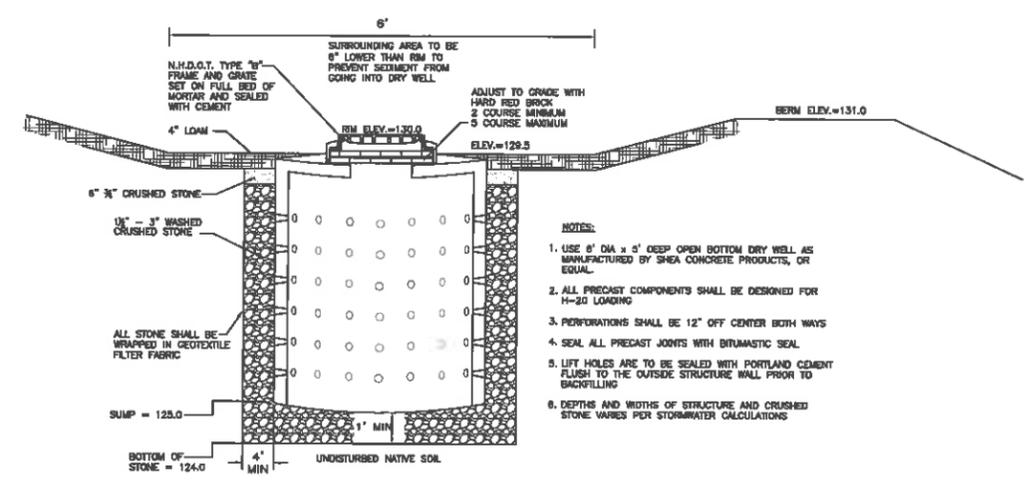
NOTE: WHERE LIMITS OF ADJACENT COLD PLANED AREAS ARE LESS THAN OR EQUAL TO 20', THE AREA BETWEEN SHALL BE COLD PLANED AND RESURFACED

ROADWAY PATCH DETAIL
NOT TO SCALE



- NOTES:**
1. USE 4' DIA x 5' DEEP OPEN BOTTOM DRY WELL AS MANUFACTURED BY SHEA CONCRETE PRODUCTS, OR EQUAL.
 2. ALL PRECAST COMPONENTS SHALL BE DESIGNED FOR H-20 LOADING
 3. PERFORATIONS SHALL BE 12" OFF CENTER BOTH WAYS
 4. SEAL ALL PRECAST JOINTS WITH BITUMASTIC SEAL.
 5. LIFT HOLES ARE TO BE SEALED WITH PORTLAND CEMENT FLUSH TO THE OUTSIDE STRUCTURE WALL PRIOR TO BACKFILLING
 6. DEPTHS AND WIDTHS OF STRUCTURE AND CRUSHED STONE VARIES PER STORMWATER CALCULATIONS

DRY WELL DETAIL
FOR ROOF DRAINAGE
NOT TO SCALE



- NOTES:**
1. USE 6' DIA x 4' DEEP OPEN BOTTOM DRY WELL AS MANUFACTURED BY SHEA CONCRETE PRODUCTS, OR EQUAL.
 2. ALL PRECAST COMPONENTS SHALL BE DESIGNED FOR H-20 LOADING
 3. PERFORATIONS SHALL BE 12" OFF CENTER BOTH WAYS
 4. SEAL ALL PRECAST JOINTS WITH BITUMASTIC SEAL.
 5. LIFT HOLES ARE TO BE SEALED WITH PORTLAND CEMENT FLUSH TO THE OUTSIDE STRUCTURE WALL PRIOR TO BACKFILLING
 6. DEPTHS AND WIDTHS OF STRUCTURE AND CRUSHED STONE VARIES PER STORMWATER CALCULATIONS

DRY WELL DETAIL
FOR ROAD DRAINAGE
NOT TO SCALE

CONSTRUCTION DETAILS
MAP 006, LOT 006
25 INGALLS STREET,
NASHUA, NEW HAMPSHIRE

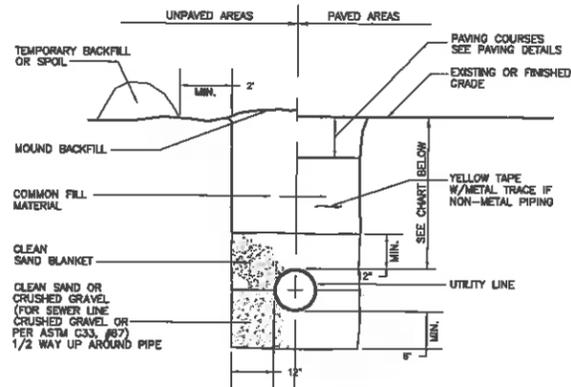
PREPARED FOR:
TUMPNEY, HURD, CLEGG, LLC
39 TRIGATE ROAD
HUDSON, NH 03051

FEBRUARY 19, 2020 SCALE: AS NOTED

ENGINEER:
RJB ENGINEERING, LLC
2 GLENDALE ROAD
CONCORD, NH 03301
PH. 603-219-0194

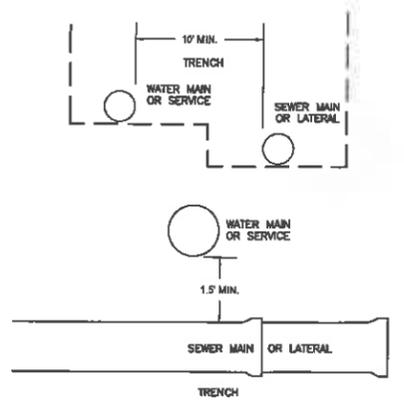
ENGINEER & SURVEYOR:
M.J. GRAINGER ENGINEERING, INC.
PROFESSIONAL ENGINEERS - SURVEYORS - PLANNERS
220 DERRY ROAD HUDSON, NH 03051 (603) 882-4359

| No. | DESCRIPTION | DATE |
|-----|------------------------|-----------|
| 1. | REVISE DRY WELL | 5/18/2020 |
| 2. | REVISE DRY WELL DETAIL | 9/16/2020 |

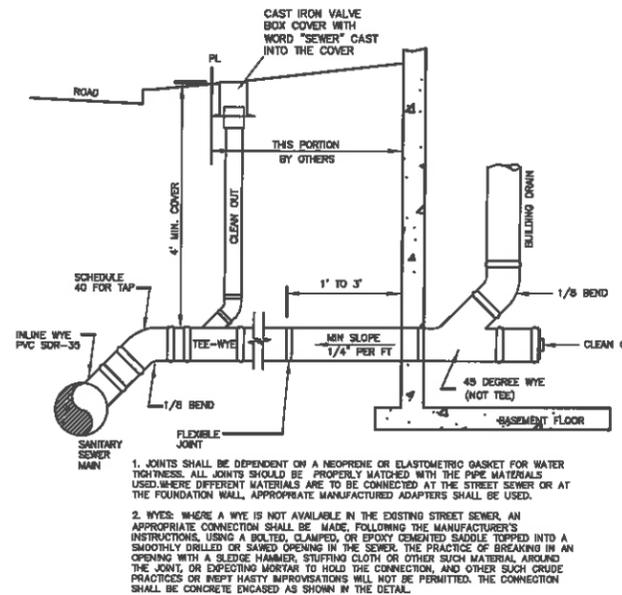


| UTILITY | MINIMUM PIPE COVER |
|---------------------|-----------------------------------|
| SANITARY SEWER MAIN | PAVED AREAS 6' UNPAVED AREAS 4' |
| STORM DRAIN | PAVED AREAS 2.5' UNPAVED AREAS 2' |
| WATER MAIN | PAVED AREAS 5' UNPAVED AREAS 5' |

TRENCH DETAIL
FOR SEWER, WATER AND DRAIN LINES NOT TO SCALE



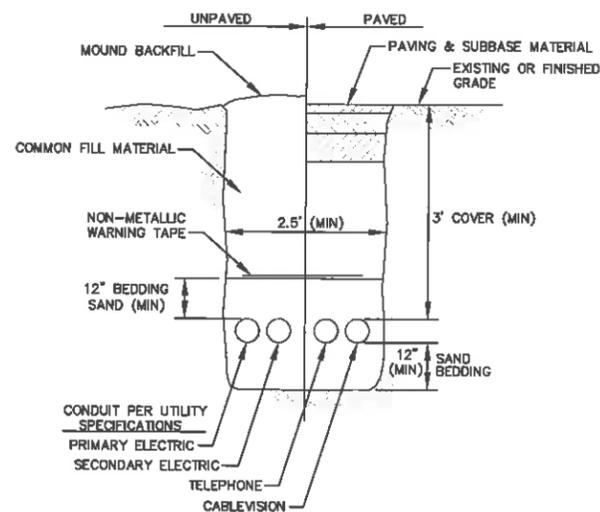
WATER / SEWER MAIN SEPARATION
NOT TO SCALE



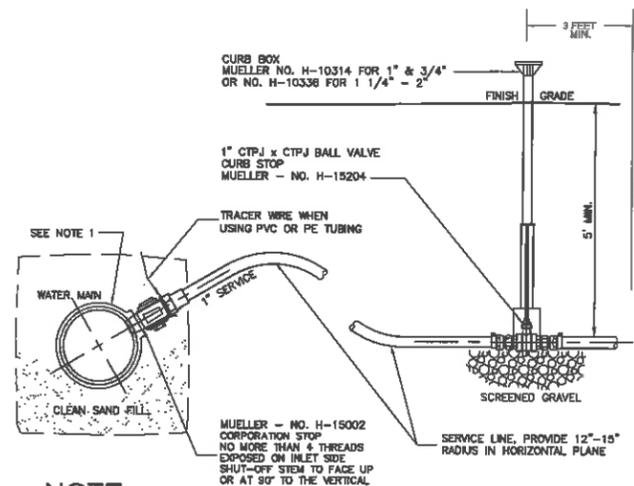
SEWER SERVICE DETAIL
NOT TO SCALE

- PIPE INSTALLATION: THE PIPE SHALL BE HANDLED, PLACED, AND JOINTED IN ACCORDANCE WITH INSTALLATION GUIDES OF THE APPROPRIATE MANUFACTURER. IT SHALL BE CAREFULLY BEDDED ON A 4 INCH LAYER OF CRUSHED STONE AND /OR GRAVEL, AS SPECIFIED IN NOTE 7. BEDDING AND RE-FILL FOR A DEPTH OF 12 INCHES ABOVE THE TOP OF THE PIPE SHALL BE CAREFULLY AND THOROUGHLY TAMPED BY HAND OR WITH THE APPROPRIATE MECHANICAL DEVICES. THE PIPE JOINTS MUST BE MADE UNDER DRY CONDITIONS. IF WATER IS PRESENT, ALL NECESSARY STEPS SHALL BE TAKEN TO Dewater THE TRENCH.
 - TESTING: THE COMPLETED HOUSE SEWER SHALL BE SUBJECTED TO A LEAKAGE TEST IN ANY OF THE FOLLOWING MANNERS: (PRIOR TO BACKFILLING)
 - AN OBSERVATION TEE SHALL BE INSTALLED AS SHOWN AND, WHEN READY FOR TESTING, AN INFLATABLE BLADDER OR SHALL BE INSERTED JUST UPSTREAM FROM THE OPENING IN THE TEE. AFTER INFLATION, WATER SHALL BE INTRODUCED INTO THE SYSTEM TO A HEIGHT OF 5 FEET ABOVE THE LEVEL OF THE FLUID.
 - THE PIPE SHALL BE LEFT EXPOSED AND LIBERALLY HOSED WITH WATER TO SIMULATE, AS CLOSELY AS POSSIBLE, NET TRENCH CONDITIONS OR, IF THE TRENCH IS MET, THE GROUND WATER SHALL BE PERMITTED TO RISE IN THE TRENCH OVER THE PIPE. INSPECTION FOR LEAKS SHALL BE MADE THROUGHOUT THE CLEAN OUT WITH A FLASHLIGHT.
 - DRY FLUORESCENCE DYE SHALL BE SPRINKLED INTO THE TRENCH OVER THE PIPE. IF THE TRENCH IS DRY, THE PIPE SHALL BE LIBERALLY HOSED WITH WATER OR, IF THE TRENCH IS MET, GROUND WATER SHALL BE PERMITTED TO RISE IN TRENCH OVER THE PIPE. OBSERVATIONS FOR LEAKS SHALL BE MADE IN THE FIRST DOWNSTREAM MANHOLE.
 - LEAKAGE OBSERVED IN ANY OF THE ABOVE TESTS SHALL BE CAUSE FOR NON-ACCEPTANCE AND THE PIPE SHALL BE DUG UP, IF NECESSARY AND RE-LAID SO AS TO ASSURE WATER TIGHTNESS.
 - ILLEGAL CONNECTION: NOTHING BUT SANITARY WASTE FLOW FROM HOUSE TOILETS, SINKS, LAUNDRY, ETC. SHALL BE PERMITTED. ROOF LEADERS, FOOTING DRAINS, SUMP PUMPS, OR ANY OTHER SIMILAR CONNECTION CARRYING RAIN WATER, DRAINAGE, OR GROUND WATER SHALL NOT BE PERMITTED.
 - HOUSE WATER SERVICE SHOULD NOT BE LAID IN THE SAME TRENCH AS SEWER SERVICE, BUT, WHEN NECESSARY, SHALL BE PLACED ABOVE AND TO ONE SIDE OF THE HOUSE SEWER AS SHOWN.
 - BEDDING: SCREENED GRAVEL AND /OR CRUSHED STONE FREE FROM CLAY, LOAM ORGANIC MATERIAL, AND MEETING ASTM C33-07.

| | |
|-----------------|-----------------|
| 100% PASSING | 1 INCH SCREEN |
| 90-100% PASSING | 7/8 INCH SCREEN |
| 20-30% PASSING | 3/8 SCREEN |
| 0-10% PASSING | #4 SEWER |
| 0-5% PASSING | #6 SEWER |
- WHERE ORDERED BY THE ENGINEER TO STABILIZE THE TRENCH BASE, SCREENED GRAVEL OR CRUSHED STONE 1/2 INCH SHALL BE USED.
- LOCATION: THE LOCATION OF THE WYE SHALL BE RECORDED AND FILED WITH THE SEWER DEPARTMENT. IN ADDITION, A METALLIC TAPE SHALL BE PLACED OVER THE PIPE TO THE WYE TO AID IN LOCATING THE BURIED PIPE.
 - CHIMNEYS: NOT PERMITTED.
 - SEWER SERVICE AND CLEAN OUT TO BE CONSTRUCTED AT TIME OF SEWER MAIN CONSTRUCTION TO EACH PROPOSED AND EXISTING LOT SERVICE TO BE BROUGHT TO RIGHT OF WAY LINE.

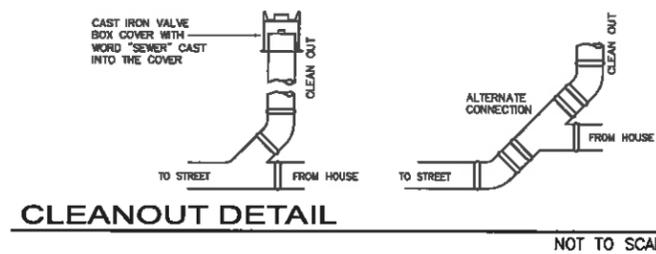


UTILITY TRENCH DETAIL
NOT TO SCALE



- NOTE:**
- CORPORATIONS UP TO 1" DIA. (INCLUSIVE) SHALL BE TAPPED DIRECTLY INTO THE MAIN AND CORPORATIONS ABOVE 1-1/2" SHALL BE INSTALLED USING A TAPPING SADDLE AND SHELL CUTTER

SERVICE CONNECTION
NOT TO SCALE



CLEANOUT DETAIL
NOT TO SCALE

CONSTRUCTION DETAILS
MAP 006, LOT 006
25 INGALLS STREET,
NASHUA, NEW HAMPSHIRE

PREPARED FOR:
TUMPNEY, HURD, CLEGG, LLC
39 TRIGATE ROAD
HUDSON, NH 03051

FEBRUARY 19, 2020

SCALE: AS NOTED

ENGINEER:
RJB ENGINEERING, LLC
2 CLENDALE ROAD
CONCORD, NH 03301
TEL. 603-219-0194

ENGINEER & SURVEYOR:
M.J. GRAINGER ENGINEERING, INC.
PROFESSIONAL ENGINEERS - SURVEYORS - PLANNERS
220 DERRY ROAD HUDSON, NH 03051 (603) 882-4359

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GENERAL NOTES:

- PROJECT ENGINEER: M.J. GRAINGER ENGINEERING, INC. 220 DERRY ROAD, HUDSON, NH
PROJECT SURVEYOR: M.J. GRAINGER ENGINEERING, INC. 220 DERRY ROAD, HUDSON, NH
PROJECT WETLAND SCIENTIST: MARC JACOBS, CWS #080
- ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO TOWN REGULATIONS AND THE LATEST EDITION OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION.
- IF DURING CONSTRUCTION IT BECOMES APPARENT THAT DEFICIENCIES EXIST IN THE APPROVED DESIGN DRAWINGS, THE CONTRACTOR, DEVELOPER OR OWNER ARE RESPONSIBLE TO DOCUMENT THE APPARENT DEFICIENCIES AND NOTIFY THE DESIGN ENGINEER PRIOR TO CONTINUING CONSTRUCTION ACTIVITIES. THE DESIGN ENGINEER, IN COOPERATION WITH THE CONTRACTOR, DEVELOPER OR OWNER WILL RESOLVE THE APPARENT DEFICIENCIES TO MEET APPLICABLE TOWN REGULATIONS.
- IF DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED, THE CONTRACTOR, DEVELOPER OR OWNER SHALL BE REQUIRED TO INSTALL ADDITIONAL EROSION PROTECTION MEASURES.
- THE CONTRACTOR SHALL CONTACT ALL UTILITY COMPANIES PRIOR TO CONSTRUCTION TO VERIFY THE LOCATION OF ALL UTILITIES OVERHEAD OR UNDERGROUND, WITHIN THE CONSTRUCTION AREA. THE PROTECTION OR RELOCATION OF UTILITIES IS ULTIMATELY THE RESPONSIBILITY OF THE CONTRACTOR. (DIG SAFE NUMBER PROVIDED ON SHEET 1)
- THE CONTRACTOR SHALL MAINTAIN EMERGENCY ACCESS TO ALL AREAS AT ALL TIMES.
- NO EXCAVATED AREA SHALL BE LEFT UNATTENDED AND SHALL BE THOROUGHLY SECURED ON A DAILY BASIS.
- THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENT AND INTENT OF RSA 430:53 AND CHAPTER 409:3800 RELATIVE TO INVASIVE SPECIES.
- THE PROPOSED LAND DISTURBANCE IS APPROXIMATELY 11,000 SF., THEREFORE, ACCORDING TO THE NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PHASE II CONSTRUCTION GENERAL PERMIT (CGP) SECTION 1.1, THIS PROJECT IS NOT REQUIRED TO COMPLY WITH THE REGULATORY CRITERIA AND INTENT OF THE NPDES PHASE II PROGRAM, LATEST EDITION.
- THE PROPOSED PROJECT WILL NOT REQUIRE STATE (NHDES) ALTERATION OF TERRAIN PERMIT, SINCE THE ANTICIPATED LAND DISTURBANCE IS LESS THAN 100,000 SF, ACCORDING TO ENV-W5 415.

EROSION CONTROL NOTES

ALL EROSION CONTROL MEASURES SHALL BE INSTALLED AND MAINTAINED FOR THE DURATION OF THE PROJECT IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS (EPA, NHDES AND TOWN REGULATIONS). THE GENERAL NOTES AND DETAILS CONTAINED IN THIS PLAN SERVE AS A GUIDE ONLY.

- PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING OPERATIONS. INSTALLATION OF STRAWBALE BARRIERS AND SILTATION FENCES SHALL BE COMPLETED PRIOR TO THE START OF SITE WORK IN ANY SPECIFIC AREA. PREFABRICATED SILTATION FENCES AND SHALL BE INSTALLED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
- EXISTING VEGETATION IS TO REMAIN UNDISTURBED WHEREVER POSSIBLE.
- THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED. ALL ROADWAYS SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE. CUT AND FILL SLOPES SHALL BE LOADED & SEEDED WITHIN 72 HOURS OF ACHIEVING FINISH GRADE. TEMPORARY AND/OR PERMANENT STABILIZATION SHALL BE INSTALLED WITHIN 45 DAYS OF INITIAL CONSTRUCTION.
AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
a. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED
b. A MINIMUM OF 80% VEGETATED GROWTH HAS BEEN ESTABLISHED
c. A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP-RAP HAS BEEN INSTALLED
d. OR, EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED
TIME LIMIT: ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE.
- ALL DISTURBED AREAS SHALL HAVE A MINIMUM OF 4" OF LOAM INSTALLED WITH NOT LESS THAN 1.1 POUNDS OF SEED MIX PER 1,000 SQ. FT. SEE SEEDING SPECIFICATIONS ON THIS SHEET
- LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE SOIL PRIOR TO OR AT THE TIME OF AT THE TIME OF S SHALL BE APPLIED. SEEDING PRACTICES SHALL COMPLY WITH LOCAL USDA SOIL CONSERVATION SERVICES RECOMMENDATIONS.
- STRAW MULCH OR JUTE MATTING SHALL BE USED IF/WHERE INDICATED ON THE PLANS. A MINIMUM OF 1.5 TONS OF MULCH PER ACRE SHALL BE APPLIED. MULCH SHALL BE ANCHORED IN PLACE WHERE NECESSARY. JUTE MATTING SHALL BE LAID IN THE DIRECTION OF RUNOFF FLOW AND APPLIED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
- PERMANENT OR TEMPORARY COVER MUST BE IN PLACE BEFORE THE GROWING SEASON ENDS. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 15 TO SEPTEMBER 15. NO DISTURBED AREA SHALL BE LEFT EXPOSED DURING WINTER MONTHS.
- TO CONTROL DUST DURING CONSTRUCTION, WATER DISTRIBUTION SHALL BE USED.
- LIMIT THE LENGTH OF EXPOSURE OF UNSTABILIZED SOIL TO 45 DAYS OR LESS.
- EROSION CONTROL PRACTICES ARE TO BE INSPECTED WEEKLY AND AFTER 0.5" OF RAINFALL.
- TEMPORARY WATER DIVERSION (SEDIMENT BASINS, SWALES, ETC.) MUST BE USED AS NECESSARY TO CONTAIN RUNOFF UNTIL SOILS ARE STABILIZED.

WINTER CONSTRUCTION NOTES

- ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS.
- ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 504.3.

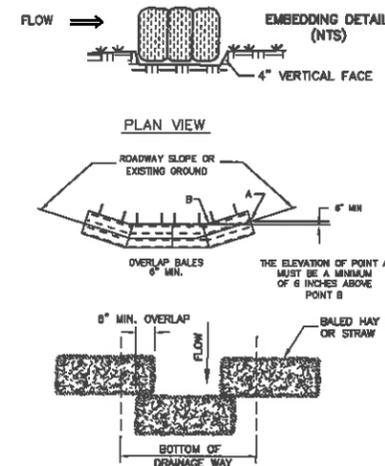
TEMPORARY SEEDING RATES:

- FOR FALL SEEDING (SEED FROM AUGUST 15 - SEPTEMBER 5 FOR BEST COVER):
WINTER RYE: 2.5 LBS PER 1,000 SF SEED TO A DEPTH OF 1 INCH
- FOR SPRING SEEDING (SEED NO LATER THAN MAY 15 FOR SUMMER PROTECTION)
OATS: 2 LBS PER 1,000 SF
SEED TO A DEPTH OF 1 INCH
- ALTERNATIVE:
PERENNIAL REYGRASS: 0.7 LBS PER 1,000 SF
SEED BETWEEN APRIL 1 AND JUNE 1 AND/OR BETWEEN
AUGUST 15 AND SEPTEMBER 15)
MULCHING WILL ALLOW SEEDING THROUGHOUT THE GROWING SEASON.
SEED TO A DEPTH OF 0.5 INCHES
- 10-10-10 FERTILIZER SHOULD BE UNIFORMLY SPREAD OVER AREA PRIOR TO BE INCORPORATED INTO THE SOIL AT A MINIMUM OF 7 LBS PER 1,000 SF
- TOP SOIL: 4" MINIMUM APPROVED TOPSOIL
STRAW MULCH - 2 BALES PER 1,000 SF
APPLY BINDER OF NETTING AS NEEDED

SEEDING SPECIFICATIONS

| MIXTURE | POUNDS/ACRE | POUNDS/1,000 SF |
|---------------------|-------------|-----------------|
| TALL FESCUE | 20 | 0.45 |
| CREeping RED FESCUE | 20 | 0.45 |
| BIRD'SFOOT TREFLOIL | 8 | 0.20 |
| TOTAL | 48 | 1.10 |

- SEEDBED PREPARATION
 - SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.
 - STONES LARGER THAN FOUR INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT FOUR INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.
- ESTABLISHING A STAND
 - LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL. KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON EVALUATION OF SOIL TESTS. WHEN A SOIL TEST IS NOT AVAILABLE, THE FOLLOWING MINIMUM AMOUNTS SHOULD BE APPLIED:
- AGRICULTURAL LIMESTONE: 2 TONS PER ACRE OR 0.09 LBS. PER SQ. FT.
- NITROGEN (N): 50 LBS. PER ACRE OR 1.1 LBS. PER 1000 SQ. FT.
- PHOSPHATE (P₂O₅): 100 LBS. PER ACRE OR 2.2 LBS. PER 1000 SQ. FT.
- POTASH (K₂O): 100 LBS. PER ACRE OR 2.2 LBS. PER 1000 SQ. FT.
(NOTE: THIS IS THE EQUIVALENT OF 500 LBS. PER ACRE OF 10-20-20 FERTILIZER OR 1,000 LBS. PER ACRE OF 5-10-10)
 - SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING, AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH 0.25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.
 - REFER TO TABLE 7-35 OF "STORMWATER MANAGEMENT AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE", FOR APPROPRIATE SEED MIXTURES AND TABLE 7-38 FOR RATES OF SEEDING. ALL LEGUMES (CROWN VETCH, BIRD'SFOOT TREFLOIL, AND PLATPEA), MUST BE INOCULATED WITH THEIR SPECIFIC INOCULANT.
 - WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 1.
- MULCH
 - STRAW, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
 - MULCH WILL BE HELD IN PLACE USING TECHNIQUES FROM THE "BEST MANAGEMENT PRACTICE FOR MULCHING", AS SHOWN IN "STORMWATER MANAGEMENT AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE".
- MAINTENANCE TO ESTABLISH A STAND
 - PLANTED AREAS SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.
 - FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIALS TAKE 2 TO 3 YEARS TO BECOME ESTABLISHED.
 - IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.



HAY BALE CHECK DAM
(EMBEDDED IN SWALE)

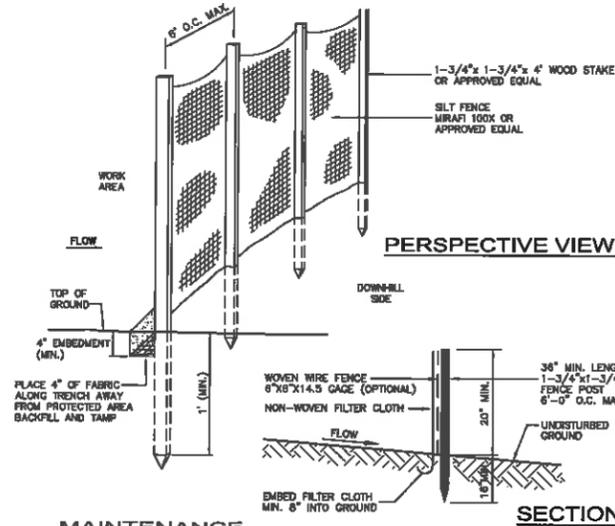
NOT TO SCALE

NOTE

- STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.
- CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION WILL BE MINIMIZED.
- WHEN HAY BALES ARE USED, THEY ARE TO BE EMBEDDED INTO THE SOIL 4 INCHES. WHEN TIMBERS ARE TO BE USED, THE TIMBER SHALL EXTEND AT LEAST 18 INCHES INTO THE SOIL.
- HAY OR STRAW BALES SHALL BE ANCHORED INTO THE SOIL USING 2"x2" STAKES DRIVEN THROUGHOUT THE BALES AT LEAST 18 INCHES INTO THE SOIL.
- SEEDING, FERTILIZING AND MULCHING SHALL CONFORM TO THE RECOMMENDATIONS IN THE APPROPRIATE BMP.
- STRUCTURES ARE TEMPORARY AND ARE TO BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS EXPIRED, WHEN A SOLID STAND OF GRASS HAS GROWN OR THE AFTER ANY STONE HAS STABILIZED

MAINTENANCE

TEMPORARY GRADE STABILIZATION STRUCTURES SHOULD BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED STORMS. ANY NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY. PARTICULAR ATTENTION SHOULD BE GIVEN TO END RUN AND EROSION AT THE DOWNSTREAM TOE OF THE STRUCTURE. WHEN STRUCTURES ARE TO BE REMOVED, THE DISTURBED PORTION SHOULD BE BROUGHT TO THE EXISTING CHANNEL GRADE AND THE AREAS PREPARED, SEEDED AND MULCHED. WHILE THIS PRACTICE IS NOT INTENDED TO BE USED PRIMARILY FOR SEDIMENT TRAPPING, SOME SEDIMENT WILL ACCUMULATE BEHIND STRUCTURES. SEDIMENT SHALL BE REMOVED FROM BEHIND STRUCTURES WHEN IT HAS ACCUMULATED TO ONE HALF OF THE ORIGINAL HEIGHT OF THE STRUCTURE.



MAINTENANCE

- SILT FENCES ARE TO BE INSPECTED IMMEDIATELY AFTER EVERY RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REPAIRS THAT ARE REQUIRED SHALL BE MADE IMMEDIATELY.
- IF THE FABRIC ON A SILT FENCE SHOULD DECOMPOSE OR BECOME INEFFECTIVE DURING THE EXPECTED LIFE OF THE FENCE, THE FABRIC SHALL BE REPLACED PROMPTLY.
- SEDIMENT DEPOSITS SHOULD BE INSPECTED AFTER EVERY STORM EVENT. THE DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE HALF OF THE BARRIER.
- SEDIMENT DEPOSITS THAT ARE REMOVED OR LEFT IN PLACE AFTER THE FABRIC HAS BEEN REMOVED, SHALL BE GRADED TO CONFORM WITH THE EXISTING TOPOGRAPHY AND VEGETATED.

SILT FENCE DETAIL

NOT TO SCALE

| No. | DESCRIPTION | DATE |
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EROSION CONTROL DETAILS

MAP 006, LOT 006
25 INGALLS STREET,
NASHUA, NEW HAMPSHIRE

PREPARED FOR:

TUMPNEY, HURD, CLEGG, LLC
39 TRIGATE ROAD
HUDSON, NH 03051

FEBRUARY 19, 2020

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